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KANSAS STATE HORTICULTURAL SOCIETY.

Special correspondence KANSAS FARMER.

The sixteenth semi-annual meeting of the Kansas State Horticultural Society was held in Memorial Hall, Wichita, Kas., June 29th and 30th, 1886. The meeting was called to order by Secretary George C. Brackett, of Lawrence. The President had removed from the State, and tendered his resignation to the Board, which was accepted, causing the Secretary to announce the unusual and sad condition of the present assembly, as their late and praiseworthy Vice-President, Judge M. B. Newman, who died in Wyandotte on June 4th, 1886. This demise, and the resignation of the President, had made it necessary for the Board of Trustees to appoint a new President and Vice-President. This they had done. Then followed the introduction, in a short appropriate address, Hon. Geo. Y. Johnson, of Lawrence, as the new President, and Wm. Cutter, Esq., of Junction City, as Vice-President, who was also present.

Mr. Johnson was invited forward, and, in a few well-pointed remarks, accepted the honor conferred upon him, then proceeded to take up the business which had called the members of this Society together. Committees were appointed as follows: On Credentials, J. T. Cox, J. Nixon, J. L. Williams. On Programme, E. P. Diehl, T. D. Fox, W. H. Litzer, D. A. Mitchell. On Resolution, H. C. St. Clair, G. T. Jackson, Robt. Milliken. On Obituary Resolutions, L. A. Simmons, Dr. Chas. Williamson, Major Frank Holsinger. On Memorial Badges, Major F. Holsinger, Frank J. Holman, Wm. Cutter. Besides the regular delegates there were present a large number of ex-officio members, and officers from many of the county organizations.

Much preliminary business was gone through with, prior to taking up of important matters, relating to horticulture and its many branches.

Then reading of the Manual on Small Fruits was called for, and Hon. F. J. Holman, of Leavenworth, advanced and read same, or that portion which treated on strawberries, when quite an animated discussion ensued, resulting in a return of the document to the committee for consideration, revision and correction, preparatory to going into print. This manual contained many choice thoughts and ideas, but to be of practical value to those for whom it is intended, there should be a boiling down, or sifting out, of the numerous unnecessary whys and wherefores, thereby making it as concise and pointed as possible, and yet, comprehensive enough to suit even the amateur in his work of selecting, planting, rearing, cultivation and care of fruits, either for home or market use.

Tuesday afternoon a general discussion on the topic of strawberries and their culture, took place, based upon the ideas brought out by the Manual on Small Fruits, and from the remarks made I glean that land should be thoroughly prepared in the fall by deep plowing, and when spring comes thoroughly pulverize same with a good harrow or other suitable article, preparatory to planting. Plant in the springtime if you would obtain good results, and in rows three and one-half feet apart, and one foot space between plants in the row. Cultivate thoroughly during growing season, with hoe mostly, and mulch in early fall, removing same in the spring. In handling strawberries for

market avoid picking and placing poor berries in your boxes, because of its inclination to create low prices when put on the market. In order to get good prices choice fruit must be grown, carefully picked, nicely assorted, and offered the consumer in first-class condition, for the day of shiftless work is fast passing away, and it is well, for no one can ever hope to make a success of this, or any other undertaking, who is negligent of energy, pride, care, industry, and a reasonable degree of economy judiciously applied.

Raspberries require the same preparation or soil as for the strawberry, and should be planted in rows six feet apart, and three feet space between plants in each row. Thorough cultivation in the early part of each is essential to success, and should never be neglected. The canes should be pinched off the first year, as soon as they get from eight to twelve inches long, and during the second year should be pinched back at least three feet. Among the different varieties of raspberries the Doolittle and Southegan takes the lead for early use; the Hopkins, Smith's and Taylor for medium; the McCormick and Gregg for late use. The net profits obtained from one acre of raspberries was given at \$150 to \$200; and of the red raspberry the Cuthbert, Brandywine, and Shaffer's Colossal are the best, and deserve wide-spread attention.

At the evening meeting of first day an address of welcome was made by Mr. H. R. Hatfield, in which he appropriately welcomed the Society to the city of Wichita, and to the enjoyment of her hospitalities. He also spoke in high commendation of the work of the Society in fostering interests which was so much needed in this country. Dr. Chas. Williamson, of Washington, responded to the welcome in a decidedly pleasing manner. Following this was an essay, or paper, on "Importance of Horticulture as an Industry," by Mr. A. Willis, of Ottawa, and its entirety consisted of valuable meat for every one desirous of taking a part in the industry of which the article treated. Then came the discussion on blackberries, which proved that the Kittatinny, Snyder, and Taylor were the best varieties, owing to greater success being attained from their cultivation. They should receive thorough and constant cultivation during the growing season. The growing canes should be pinched back to two or three for the first year for the encouragement of the growth of the branches or laterals, and should be mulched during winter months for consecutive years. Several growers had realized as high as \$800 per acre. The Kittatinny seems to be the best. An objection exists against the Snyder, owing to its inclination to bear too many, and failure of maturing properly.

A paper followed this on "Currant Culture," by Chas. Williamson, of Washington, who thought the currant most successful in moist, rich soil, both in the shade and in open ground. Attention is called to currant growing in this State, and as a healthful fruit no one doubts its superiority over that of many other known variety of fruits.

At intervals during the evening meetings the Knights of Pythias band discoursed choice music, which was highly appreciated by the Society.

The second day of the session was devoted largely to papers, as follows: On "Handling Fruits," by Major Frank Holsinger, of Rosedale; on "Science in Horti-

culture, etc.," by L. A. Simmons, of Wellington; on "Mistakes and Experiences in Horticulture," by Dr. Chas. Williamson; on "The Practices of Fifty Years in Fruit Growing," by A. J. Cook; on "Embellishment of Farm Houses," by John Davis, of Junction City; on "Ornamental Planting," by Robert Milliken of Emporia, all excellent papers full of good food, so much so that they all will appear in the columns of the KANSAS FARMER as fast as time and space will permit. The forenoon was taken up principally by reports of delegates from each portion of the State concerning the condition of fruits, etc., from which the Society gained valuable information. While a part of the afternoon was devoted to miscellaneous talks on horticultural themes.

The evening meeting, and last one of this session, was opened by the President's semi-annual address, which will appear in the next week's issue of this paper. It was listened to with marked attention, and as an article of worth, its value is indeed great, and it will be well for each one receiving a copy of same to study it carefully and profit by the teachings to be found therein. After the customary resolutions had been offered, passed upon and adopted, the Society adjourned, all feeling that it was good to attend meetings of the nature like unto the one just drawn to a close.

The KANSAS FARMER, Rural World and Live Stock Record were each represented, also the local press.

Among the choice displays of fruits made before the Horticultural Society, none surpassed that of the Hart Pioneer Nurseries of Fort Scott, Kas. Hon. H. B. Hart, President of these very honorable and popular nurseries, exhibited a number of boxes and clusters of the Shaffer's Colossal raspberries, which for flavor and beauty surpassed anything of the like that I have ever seen in this or any other State. These berries attracted attention of all present and the good remarks made in their behalf will do good for the party making the exhibit. He also had on exhibition choice blackberries, both in boxes and clusters, of the Kittatinny and Snyder varieties. Capt. Mosher made a fine show of last year's apples, as well as a good showing of this season's fruit. Mr. M. is acknowledged authority on fruits, and his success as an horticulturist amply verifies the same. Practical work tells, every time. The ripe pears which were on exhibition before this Society were of the Doyenne D'ete variety, and are said to be of much worth for early use.

The next annual meeting of the Horticultural Society will in all probability be held in the city of Emporia, at a time yet to be designated. HORACE.

A year ago one of a pair of canaries owned by a young woman of Waynesboro, Ga., died, and its mate, an excellent singer, refused to whistle a note. It maintained an unbroken silence for full twelve months, and then the other day began singing, and now is a really remarkable songster.

The late venerable Timothy Dodd, of Boston, boarded for a long time at the American House. He stood in front of the hotel one day when a stranger rushed up and screamed out: "I'm in a great hurry, and I want to get to the Fitchburg depot!" Mr. Dodd, bowing and speaking in that mild way of his, said: "I hope, sir, that you will not allow me to detain you."

Chapter on Railroad Passes.

Kansas Farmer:

One of the next questions in regard to railroads that will come up before our Legislature will probably be in regard to the granting of passes. Those that have not looked into the subject can hardly realize what an enormous amount of free riding on railroads is done in this country, and the most of it is given to those that are the best able to pay, while those with limited means, or without influence, have always to pay full fare. The President of the Union Pacific Railway stated a few months ago that, in spite of all they could do, passes were issued to the amount of \$2,000 a day on an average, on the roads controlled by that corporation, and he was in hopes that Congress would pass a law to make it an offense for a railroad company to grant passes. That was the sentiment, if not the exact words. Whether other railroad officials think the same I do not know, but presume they do, for the applications for passes, at times, exceeds the call for regular tickets. A friend who came up on the cars in the early part of the session of the Legislature of 1885, told me that there were forty persons in his car, and only one paid his fare. That, probably, was an exceptional case, but there is not much doubt that one in six who ride on railways get along without paying their fare. The estimate on the Union Pacific is over \$700,000 a year, and taking the same ratio for Kansas railroads, it would be nearly as much, or about one-fifth of all they receive for carrying passengers.

Discrimination in the carrying of passengers should be dealt with the same as we do now with freight, no matter who it affects. Of course no one would object to giving railroad employes a free ride, but every one else should be made to pay what the rest on the same train pays, whether he is an editor or a public officer. There is no doubt but that the regular fare could be reduced one-half cent a mile, if all paid, and the railroad company would be as well, or better off, than now. Reduced fare does not always mean less money at the end of the year, by any means.

One of our Eastern railroads, three years ago, reduced the fare from three cents to two and a half cents, and the income the next year from passengers was several hundred thousand dollars more than it was the year before.

A law that would give our Railroad Commissioners the same power to regulate passenger fare that they have in regard to freights, perhaps, might be all that would be required. What we want is cheap fare, so the poor man can get out into the world and learn how to get along better by seeing what others have done.

E. W. BROWN.

The oldest and smallest republic in the world, San Marino, is enclosed on all sides by Italian provinces. It is in a flourishing condition, although it has but one principal town and four or five villages, with an aggregate population of between 8,000 and 9,000. It is 2,200 feet above the level of the sea; has a Governor, schools, churches, a theater, a town hall, a museum, two convents and a couple of vast cisterns to supply the public with water. Rural employment and silk manufacture are the principal industries. The army of San Marino consists of about 1,000 men.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

August 5—W. H. H. Cundiff, Short-horns, Pleasant Hill, Mo.
August 24—T. A. Hubbard, Short-horns, Wellington, Kas.
Tuesday and Wednesday of next Kansas City Fat Stock Show, Inter-State Breeders' Association, Short-horns.

Waste in Feeding.

This is a very important subject. Farmers of Kansas are specially interested in it. Here is what Waldo F. Brown, a competent person, says about it. We copy from an article in the *National Stockman* of Pittsburgh, Pa.:

The common cause of waste is feeding poor stock. On how many farms can still be found scrub cattle that will not attain a greater weight at three years old than good grade Short-horns will at two! And yet it is often true that farmers will use a scrub yearling bull rather than pay \$2 for the service of a thoroughbred Short-horn. I have known many a Short-horn bull sold from a neighborhood where there was great need of improvement in the cattle, because he was not patronized enough to pay his keeping. If you should offer one of these farmers thirty cents a bushel for his corn and the established price was forty cents, he would think you demented; and yet by feeding it to the class of stock he keeps he is virtually selling it below the market price.

Underfeeding is another common cause of waste, and yet many farmers actually think they are economizing by wintering three cattle on the amount of food two should have. How large a percent. of the cattle of your neighborhood weigh less in April than they do in October? A certain amount of food, called the food of support, is required to keep up the waste of the system, and no gain can be made unless more food is given than this. It seems to me just as unwise to barely feed enough to keep the animal from starvation as it would to only furnish fuel enough under the steam boiler to make the water scalding hot, but not enough to bring it to a boil and generate steam. When once the water was at this point it would require but a small addition to the fuel to develop steam and give power to drive the machinery, but the parsimony which scrimps the fuel involves the total waste of all that is used.

Another prolific cause of waste is in feeding stock through the winter without shelter. It is as plain as that one and one are two, that food used to keep up animal heat makes neither flesh, fat nor milk; and yet a large percent. of our cattle are still wintered without shelter. I think I have proved by actual experiment that the same amount of food required to keep a cow or steer from losing flesh if fed out-of-doors in all weather through the winter, will add 100 pounds to it if warmly sheltered. We notice the loss quicker in milk than in flesh, and in the warm basement stable which I described recently my cows have not decreased a particle in milk during the last three days, though we have had the worst blizzard I ever remember, mercury ranging for sixty hours from zero to 15 deg. below, the wind blowing a gale, and the air filled with snow, so that one could scarcely see fifty feet for over half that time. Any farmer knows that if my cows had been out in the storm and cold they would have shrunk one-half or more in their milk; and the same is true of the loss of flesh, but it cannot be so quickly detected as that of milk. Some years ago I bought an agricultural boiler (a sixty-gallon kettle on a stove) with a large surface exposed to the air. I set it up out-of-doors, but soon found that in a cold, windy day I could scarcely

make a fire hot enough to bring the water to a boil in it. I then moved it into a building where it was protected, and found that I saved half the fuel. This is a good illustration of feeding stock exposed to the cold and storms of winter. Both for the sake of humanity and profit I would have warm shelter for every head of stock wintered, and would sell in the fall any stock which I could not so shelter.

Another waste in the keeping of stock comes from unscientific feeding. Food to be assimilated and do the animal the most good must contain a certain proportion of fat and heat and of flesh-forming material. If we winter a cow on hay and straw alone the food is deficient in fat-formers, and not only will a part of it pass through the animal undigested, but unless the hay is of the best quality the cow will become constipated and in poor flesh. She will need to eat to supply the waste of the system, more than she could digest. The cost of wintering on hay will often be as great as though a small ration of grain was given each day and less hay fed. I know of no better illustration than that of the mortar the mason uses. To make good mortar the proportions of sand, lime and water must be right, and any deviation from these proportions impairs the quality of the mortar. So to feed without waste requires an intelligent combination of the food elements needed. The exclusive corn-feeding of any stock, but particularly of young growing animals, is unscientific and wasteful. Probably the majority of farmers have given too little thought to the particular object they have in view in feeding, and are not as careful as they should be to give sufficient variety in food and to see that the food is suited to the animal. A colt that is grown for muscle ought not to be fed on corn like a fat hog, and yet a majority of farmers in the great corn belt feed no other grain, simply because they have the corn handy.

I have not referred to feeding in the mud, where corn and fodder are trodden under foot, and much of it lost; to feeding off stalk pasture during open muddy weather to the great detriment of the land; to overstocking and too early grazing of pasture fields, by which means they are permanently injured and the stock rendered unthrifty; but all these might be classed among the wastes of feeding. And adding these to the others mentioned, it is not hard to believe that on many farms the wasted part bears a large proportion to the whole, and that such intelligent management as would enable all farmers to feed without waste would soon relieve them of debt and make them and the country promising.

Extermination of Ticks.

A writer in the *National Live Stock Journal* gives results of experience and observation on the subject as follows:

Flock masters generally will have finished shearing during June, and the flocks will be sent to pasture to run, with more or less looking after until after harvest. If the flock was well cared for last year there will be very few ticks, and these will be on the lambs, having been driven from the shorn sheep on account of absence of any protection by the wool. The lambs, having a fair growth of wool already, offer a suitable harbor for the parasites. It is not difficult to exterminate them altogether from a flock, and thus save much trouble and considerable cost for food. Sheep infested with ticks can not fatten, as the food which would be assimilated and stored up in the shape of fat will go to supply the loss of blood taken by the parasites. It costs money to support ticks, and they make no re-

turn therefor. About three weeks after the ewes have been shorn, the lambs should be dipped in some solution which will kill the ticks. Most farmers can get tobacco stems, or damaged tobacco, which has for some reason become unsalable. This tobacco should be put into a large kettle in sufficient quantity to make a strong decoction when well boiled. I do not know just how many pounds of tobacco stems, or of damaged tobacco are best to be used for each barrel of water used for dipping, but it is within any ordinary man's judgment to decide whether the liquor is not so strong as to injure the animal, and yet be strong enough to kill the vermin. I never weighed the tobacco stems, but should think five pounds enough for a barrel of dip. After it is well boiled in water sufficient to cover it well, a couple of pailfuls of the liquor would be about right for ten or twelve pailfuls of warm water. If the dip is just warm to the hand, the shock to the lamb is not so great, and I think the ticks are more certainly killed.

A large tub or vat must be provided, large enough so that the lambs can be put into it easily, without doubling their necks too closely over on one side. If too small, the ticks on the side to which the neck is bent to get the animal into the tub, are apt to be compressed so closely by the wrinkles or folds in the skin and flesh, that the liquor never touches them, and they escape safely to harass the animals and propagate their species. Into this tub put sufficient water to more than cover the body of the lamb when put into it, and add to this one part in four to six, of the decoction of tobacco. Some add a little flour of sulphur to the mixture; but I never could see any reason for it, as the tobacco will kill the ticks if strong enough, and if not sufficiently strong the sulphur does not help it any. Sulphur does not dissolve, and the little that gets into the wool is not sufficient to injure the ticks, unless in quantity so large that the sheep itself is injured. For parasitic insects which burrow in the skin, like that causing scab, the rubbing in of sulphur is excellent, but the animals must be protected from cold storms for a while.

Before commencing to dip sheep or lambs, a flat trough should be provided, on which to lay the animals as soon as they have been dipped, in order that the superfluous liquor may drain off; and this may be hastened by squeezing and stroking the skin from the head toward the tail. In this way nearly all the liquor can be saved, and if the trough has been placed with one end over the edge of the tank in which the animals are dipped, the liquor thus pressed out of the lamb's fleece will all run back, and the waste will be slow. By taking hold of the back of the animal's neck with one hand, and both hind feet with the other, a lamb can be dipped very easily and expeditiously, without danger of its getting the liquor into its mouth or nose. The animal should be immersed all over except the nose and hind feet. The work should be done, if possible, in the forenoon of a pleasant day, so that the lambs may dry out before nightfall. There will be enough extract of the tobacco left on the lamb's wool and skin after the water has dried out, to kill any ticks which may hatch out after the dipping has been done, so that one dipping is enough, if carefully and well done.

Many prefer to use a prepared dip, but wherever tobacco stems or refuse tobacco can be obtained, it is less expensive to use this. If there are ticks on the older sheep they must all be dipped, whatever the extra cost and labor, or there will be little gained by dipping the lambs. If the work is done

before the wool has grown much after shearing, the ticks will go on the lambs, if there are any in the flock. When there are no lambs in a flock, and the sheep were infested with ticks during the winter, some will remain on the animals, and as soon as the wool is long enough they will again increase in numbers. Once exterminated, there is no trouble in keeping the flock clean, and there will be little trouble in the winter from "paper skin" among the lambs.

Care of Lambs--The Best Way to Feed Them After They Have Been Turned to Grass.

The agricultural editor of the *Cincinnati Enquirer* says it is impossible to overestimate the importance of giving the highest care and the best feed to young animals of all classes. I have so often seen a lamb taken from a flock at random, fed "from the top-shelf" as a cosset, and made to yield twelve to fifteen pounds of wool, while others of just as good blood and breeding left to the ordinary care of the main flock yielded only five or six, that I could express my experience thus: An ounce of feed given to a lamb is worth more than a pound given to a grown sheep.

In thirty years' experience on the farm, I have come to the conclusion that, with the proper kind of feed, it is impossible to give any young animal too much, if it has abundant exercise. A lamb might be injured by an excess of meal, corn or oil cake meal, but not by any amount of wheat bran or oats that it will consume if fed regularly. I say this in full knowledge of the fact that it is the fattest and most thrifty lambs that generally fall victim to the so-called "lamb cholera" (which is a clear misnomer, since this is, in a great majority of cases, nothing but an acute form of indigestion, flatulency or colic.) And, indeed, the best preventive, and almost the only one of any value against this prevalent plague of low sour lands, is dry feeding, either of lambs alone, or of both ewes and lambs. A moderate portion of dry feed, continued through the spring and early summer, to those flocks which are grazing on lands of this class (hilly pastures—it seldom occurs on others), serves to correct this tendency to acidity and flatulency. Ashes or lime is also recommended for the ewes.

A very highly-fed lamb should have abundant exercise. A lamb which passes all its time in a field with one or more others will of itself take all the exercise necessary, and such a one can not be overfed with proper feed.

The best way to feed a flock of lambs after they have been turned to grass in the spring is, to drive up ewes and lambs at evening into a yard adjoining a sheep house to which the lambs have been accustomed all their lives. Across the open door set a hay rack on blocks high enough to allow the lambs to run under, but not the ewes. Around the wall on the inside have flat-bottomed troughs, the tops six inches above the ground, with the feed scattered thinly in them and very lightly salted. Let the flock go short on salt otherwise; then the lambs will swarm into the sheep house as soon as the flock comes into the yard, and will consume the feed readily, at first for the salt, but presently for the feed itself.

Every other evening or every third evening, let the salt which is sprinkled on the feed be mixed with one-sixth of its bulk of finely-powdered copperas, as a preventive of the parasites which cause paper skin.

If the ewes and lambs pass the night in the yard, it must be heavily littered with cornstalks or straw, or else the ammoniacal exhalations will soon become intolerable, and injure the health of the sheep. The heat and the copious urine of the season produce ammonia with great rapidity. If there is no danger from dogs or other enemies, it is better to allow the whole flock, after they have eaten their feed, to go back to the field for the night. That is, it is undoubtedly better for the flock, but I have often thought that for the first month or two of the very washy grass, it would pay to do a good deal of work in littering a yard for the ewe flock, to prevent the smearing of the pasture which takes place at every night's camping ground. After the season is advanced and the grass becomes dryer, it does not so much matter.

In the Dairy.

About Making Butter.

James Murdock, in *Nor-West Farmer*, discusses the subject this way:

In this essay I will endeavor to point out some of the reasons why so much butter of an inferior quality is put upon the market. The most of the blame is saddled upon the farmer, and certainly that individual and his wife deserve a considerable share of it, but not all of it by any means.

The country merchant is somewhat to blame in the matter. For fear of giving offense to an otherwise good customer, he will give Mrs. A. the same price for her mixture of grease, butter-milk and salt as he gives Mrs. B. for a really good article. The consequence is that the farmer's wife with but a few cows, who, perhaps from necessity, is compelled to trade her butter for groceries at the nearest store, has really no encouragement to do her best. And after reaching the cellar of the said merchant it may be there for days, subject to the fumes and gases generated by coal oil and tobacco, it then gets a sort of mixing, is packed in tubs, and is shipped off somewhere, and, of course, it is not fit for human food, and it gives the district from which it was sent a bad name.

Another reason is cows drinking impure water. Butter that looks well and perhaps tastes well, carefully made, an article that an expert could find no fault with, and yet it will not keep sweet for any length of time.

Again, cows milked by careless persons who may neglect to wash the udder of the animal with clean water, and rub it dry with a clean cloth before commencing to milk, but who may wet the dirty teat with milk, and lets the foul stuff drop into the milk pail, cannot make a good article of butter or cheese, and does not deserve to get the highest price for his produce.

Again, if cows are not in the best of health, or when a cow is in heat, the milk of such animals should not be used in making dairy produce, but should be fed to the pigs.

Some people think that the remedy for all the evils connected with this industry is to establish creameries all over the land, and perhaps those people are correct. But the creamery system, though it has many advantages, has some drawbacks. It is doubtful if all the patrons of such an establishment would always furnish milk just as it should be, and if anything is wrong with the milk from any cause whatever it should not be used in the dairy.

But real nice butter can be made, and is made by the farmers' wives, and if you, Mr. Editor, wish to see a grand display of the gilt-edged article, you have only to visit our agricultural exhibition to be held at Crystal City, the coming autumn, and I think you will go home satisfied, taking with you a package or two for winter use.

Now there will be a difference of opinion as to how to get the best results from dairy stock. Few farmers in Manitoba have the means to buy fancy stock with a high milk and butter record, and also a high price, so we must be content with what we have to begin with, and try to improve them by selecting the best and using well-bred bulls, and just here I will say in selecting cows for the dairy it is not size so much as milk and butter that we want. And again the value of a cow cannot be measured altogether by the quantity of milk she gives but its richness should be considered. It is the yield of butter more than the yield of milk that is the true test of a cow's value. Evenness

of quantity of milk is also to be desired.

Many farmers have the idea that cows should live on very little, and they expect them to give rich milk while running out and feeding around a straw stack. Others think they do extra when they stable their animals and give them a ration of dry grain.

And it is a fact that if all farmers would live up to such a practice cattle would look much better, and be much more profitable than at present we find them.

Clean well-cured hay, and sound, dry grain, make good sinew and solid flesh and fat, but it does not furnish all that a milch cow requires. This dry feed goes mostly to form flesh, animal tissue and fat. A fine looking herd of sleek animals is the result. A dairyman of experience knows that a cow cannot lay on fat to any great extent while yielding a large flow of milk. The milk is what he wants, and he has found out that while the rich dry food will yield a small quantity of rich milk he must add something more to the diet that will have a tendency to turn some of the dry grain food into milk. In summer in no country in the world is such an abundant supply of rich, succulent food found as in Manitoba. The variety and richness of our grasses is not understood by outsiders, and late in the fall when the grass dries up somewhat, a few beets, carrots or potatoes might be given to the cows with good results.

Let us then keep our cows well. Feed them generously, use the best dairy appliances that can be had, give the cows pump water and plenty of it. Be particular in every detail. Use common sense, and the results will astonish the most of us.

A Cow With First Calf.

It is often the case when a heifer has her first calf that the farmer thinks she will not give more milk than will keep the calf in good condition, and lets them run together to teach the mystery of being milked when she has her next calf, says an exchange. In this decision there are two mistakes that go far to spoil the cow for future usefulness. Cows, says a contemporary, are largely creatures of habit, and with their first calf everything is new and strange to them, and readily submit to being milked, and think it is all right; but suffer them to run with the calf the first season, and a vicious habit is established that they will hardly forget in a lifetime. If they ever submit to be milked quietly, it is evidently under protest. But there is a greater objection than this—the calf running with the cow draws the milk every hour or two, so that the milk vessels are not at any time distended with milk, though the quantity secreted in a given time may be large. But this is the natural time to distend the milk ducts and expand the udder to a good capacity for holding milk. When, with her next calf, you require the milk to be retained twelve hours, the udder becomes hard and painful, and the milk leaks from the teats, or more likely, nature accommodates the quantity of milk secreted to the capacity to retain it, and the cow becomes permanently a small milker. Much of the future character of a cow, therefore, depends upon her treatment with her first calf. Everything that disturbs the quietness of a cow impairs the milk both in quantity and quality. To obtain the best results, therefore, there should be a regular time and place of milking, and, as far as possible, the milking should be done by the same persons. Any cow can be milked dry in a few weeks by irregular milking, sometimes at intervals of twenty-four hours and sometimes of six. Separation from her usual company, a change to new location, a strange milker, and, above all, a blustering manner and scolding voice, are sources of irritation that more or less impair the milking qualities of a cow. No cow under the influence of fear will give her full quantity of milk.—*Rural Canadian*.

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

HORSES.

THOROUGHBRED AND TROTTER HORSES and **Poland China Hogs** bred and for sale. Write for pedigrees. O. B. Hildreth, Newton, Kas.

H. W. McAFEE, Topeka, Kas.—For sale, six extra good Registered Short-horn Bulls. Also Clydesdale Horses. Three miles west of Topeka, 6th St. road.

C. W. CULP, Scottsbluff, Kas., importer and breeder of Norman and Clydesdale Stallions. Prices and terms to suit buyers. Correspondence solicited. Visitors welcome.

CATTLE.

JERSEY CATTLE.—A. J. C. C. Jersey Cattle, of noted butter families. Family cows and young stock of either sex for sale. Send for catalogue. C. W. Talmadge, Council Grove, Kas.

GUERNSEYS.—Elm Park Place, Lawrence, Kas. G. L. Bullene, dealer in registered Guernsey Cattle. Young stock for sale. Telephone connection to farm.

W. D. WARREN & CO., Maple Hill, Kas., importers and breeders of **RED POLLED CATTLE**. Thoroughbred and grade bulls for sale. St. Marys railroad station.

FRANK H. JACKSON, Maple Hill, Kas., breeder of **HEREFORD CATTLE**. Young thoroughbred Bulls always on hand for sale. Choicest blood and quality.

T. M. MARCY & SON, Wakarusa, Kas., have for sale Registered yearling Short-horn Bulls and Heifers, of each thirty head. Carload lots a specialty. Come and see.

J. S. GOODRICH, Goodrich, Kas., breeder of Thoroughbred and Grade Galloway Cattle. Thoroughbred and half-blood Bulls for sale. 60 High-grade Cows with calf. Correspondence invited.

FISH CREEK HERD of Short-horn Cattle, consisting of the leading families. Youngstock and Bronze Turkeys for sale. Walter Latimer, Prop'r, Garnett, Kas.

CEDAR-CROFT HERD SHORT-HORNS.—E. C. Evans & Son, Prop'r, Sedalia, Mo. Youngsters of the most popular families for sale. Also Bronze Turkeys and Plymouth Rock Chickens. Write or call at office of Dr. E. C. Evans, in city.

BROAD LAWN HERD of Short-horns. Robt. Patton, Hamlin, Kas., Prop'r. Herd numbers about 120 head. Bulls and Cows for sale.

CATTLE AND SWINE.

F. W. ARNOLD & CO., Osborne, Kas., breed **Poland-China Hogs** (O. P. C. R.), **American Merino Sheep**, **Wyandotte** and **Langshan Fowls**. Young stock for sale. Write for terms.

M. H. ALBERTY, Cherokee, Kas., makes a specialty of breeding **Holstein-Friesian** and **Jersey Cattle**, **Poland-China Swine**, and **Plymouth Rock Fowls**. Eggs for sale. All stock recorded. Cattle and swine of both sexes for sale. Correspondence invited.

PLATTE VIEW HERD—Of Thoroughbred Short-horn Cattle, Chester White and Berkshire Hogs. Address E. M. Finney & Co., Box 790, Fremont, Neb.

ROME PARK STOCK FARM.—T. A. Hubbard, Wellington, Kas., breeder of high-grade Short-horn Cattle. By car lot or single. Also breeder of **Poland-China** and **Large English Berkshire Swine**. Inspection invited. Write.

ASH GROVE STOCK FARM.—J. F. Glick, Highland, Doniphan county, Kansas, breeds **first-class THOROUGHBRED SHORT-HORN CATTLE** and **POLAND-CHINA SWINE**.

Youngstock for sale. Inspection and correspondence invited.

D. R. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle. Hambletonian Horses of the most fashionable strain, pure-bred Jersey Red Hogs and Jersey Cattle.

SHORT-HORN PARK, containing 2,000 acres, for sale. Also, Short-horn Cattle and Registered Poland-China. Young stock for sale. Address B. F. Dole, Canton, McPherson Co., Kas.

SWINE.

150 Pedigreed POLAND-CHINA and LARGE ENGLISH BERKSHIRE Pigs, at \$10 and upward. F. M. Rooks & Co., Burlingame, Kas., or Boonville, Mo.

W. M. PLUMMER, Osage City, Kansas, breeder of Recorded Poland-China Swine. Also Light Brahma Chickens. Stock for sale at reasonable rates.

M. LAIL, MARSHALL, Mo., breeder of the finest strains of **POLAND-CHINA HOGS** and **PLYMOUTH ROCK CHICKENS**. Eggs in season, \$1 for 13. Catalogue free.

ELM GROVE HERD OF REGISTERED **POLAND-CHINA SWINE**. Z. D. Smith, proprietor, Greenleaf, Washington Co., Kas. Has on hand pigs of all ages at reasonable prices. Write for what you want or come and see. Satisfaction guaranteed.

BAHNTGE BROS., Winfield, Kas., breeders of Large English Berkshire Swine of prize-winning strains. None but the best. Prices as low as the lowest. Correspondence solicited.

V. B. HOWEY, Box 103, Topeka, Kas., breeder of the finest strains of Improved Poland-China Swine. Breeders recorded in Ohio Poland-China Record. Young stock and sows in pig at prices to suit the times. Write for what you want.

OUR ILLUSTRATED JOURNAL.—A full and complete history of the Poland-China Hog, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

SHEEP.

IMPROVED REGISTERED MERINO SHEEP. **Poland-China Hogs**, **Light Brahmas**, **Plymouth Rocks** and **Bronze Turkeys**—all of prize-winning strains, bred and for sale by R. T. McCullay & Bro., Lee's Summit, Jackson county, Mo.

SHEEP.



MERINO SHEEP.

Berkshire Hogs, Short-horn Cattle, and thirty varieties of high-class Poultry. All breeding stock recorded. Eggs for sale in season. Write for wants and get prices. **HARRY McCULLOUGH**, Fayette, Mo.

H. V. PUGSLEY, Plattsburg, Mo., breeder of **MERINO** Sheep. Ewes averaged nearly 17 lbs.; stock rams, 34 lbs. to 38½ lbs. Extra rams and ewes for sale. Also **Holstein Cattle**.

POULTRY.

PLYMOUTH ROCKS.—W. E. Doud, Eureka, Kas., breeder of **Plymouth Rocks**. Eggs, \$1.50 per 13. Birds for sale at from \$1 to \$5 each.

A. D. JENCKS, 411 Polk street, North Topeka, Kas., breeds the **Hawkins**, **Conger** and **Pitkin** strains of **Plymouth Rocks**. Young stock for sale.

EUREKA POULTRY YARDS.—L. E. Pixley, Eureka, Kas., breeder of **Wyandottes**, **B. B. R. Games**, **P. Rocks**, **B. and W. Leghorns**, **Buff Cochins** and **Pekin Ducks**. Eggs and birds in season. Write for what you want.

EGGS.—For nearly three (3) years I have been collecting choice birds and choice stock, without offering any for the market. I am now prepared to furnish a few eggs of the following varieties. The large White Imperial Pekin Duck, \$1.50 per 14 (two settings); Light Brahma, Plymouth Rock and Rose-comb Brown Leghorns, \$1.25 per 13. Valley Falls Poultry Yard, P. O. Box 237, Valley Falls, Kas. J. W. Hile, Prop'r.

T. S. HAWLEY, Topeka, Kas., breeder of nine varieties of **THOROUGHBRED FOWLS**.

Only the best fowls used. Send postal card for my new circular. Eggs for sale now. Satisfaction guaranteed.

15 PLYMOUTH ROCK EGGS—\$1.50. Toulouse Geese Eggs, Thoroughbred Poland-China Hogs. Isaac H. Shannon, Girard, Kas.

HIGH-SCORING WYANDOTTES AND **B. LEGHORN** eggs. Eggs, \$2.00 per 13. Chickens for sale this fall. Address Geo. R. Craft, Blue Rapids, Kas.

N. R. NYE, Leavenworth, Kas., breeder of the leading varieties of **Land and Water Fowls**. **DARK BRAHMAS** a specialty. Send for Circular.

BROWN LEGHORN EGGS—Pure blood and fine stock, from the celebrated Bonney strain of noted layers. Thirteen eggs for \$1.50; 39 for \$3.50. A few P. R. eggs, 13 for \$2.50—very choice stock. J. P. Farnsworth, 62 Tyler street, Topeka.

LANGSHANS!

I have a fine yard of pure-bred Langshans. Can spare a few settings of eggs at \$2.00 per 13. Warrant eggs to be fresh. Chickens for sale this fall. J. A. BUELL, BLUE RAPIDS, KAS.

SHAWNEE POULTRY YARDS.—Jno. G. Hewitt, Prop'r, Topeka, Kas., breeder of choice varieties of Poultry. **Wyandottes** and **P. Cochins** a specialty. Eggs and chicks for sale.

ONE DOLLAR PER THIRTEEN—For Eggs from my choice **Plymouth Rock Fowls** and extra **Pekin Ducks**. Mark S. Salisbury, Box 31, Kansas City, Mo.

MISCELLANEOUS.

S. S. URMY, 137 Kansas avenue, Topeka, Kas., **Live Stock Auctioneer**. Sales made in any part of the State. Correspondence solicited.

BARNES & GAGE, Land and Live Stock Brokers Junction City, Kas., have large lists of thoroughbred Cattle, Horses and Hogs. Special bargains in fine individuals. Correspondence solicited.

S. A. SAWYER, Manhattan, Kas., **Live Stock Auctioneer**. Sales made in all the States and Canada. Good reference. Have full sets of Herd Books. Compiles catalogues.

600 Merino Sheep for Sale.

Mostly Ewes, acclimated and free from disease. I must sell as my range is all fenced. J. C. DWELLE, Att'y at Law, Florence, Kansas.

TIMBER LINE HERD —OF— HOLSTEIN CATTLE —AND— POLAND-CHINA HOGS.

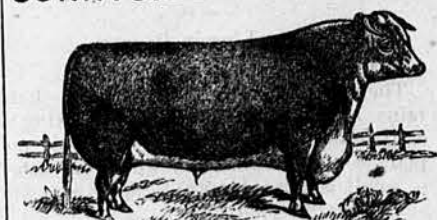
We are before the public for the year 1886 with some of the finest **HOLSTEIN BULLS** there is in the State, and **COWS** and **HEIFERS** of like merit.

At Prices to Suit the Times.

In Hogs, our herd has only to be seen to be admired. We have a fine lot of March and April Pigs. Ask for what you want.

W. J. ESTES & SONS,
Andover, Kansas.

SUNNYSIDE STOCK FARM



F. R. FOSTER & SONS, TOPEKA, KAS. Breeders and dealers in Thoroughbred and Grade **HEREFORD CATTLE**. Thoroughbred Bulls ready for service always on hand. Grade Hereford Heifers, singly or in car lots, for sale. Will take Cows for breeding on reasonable terms. All Bulls registered and guaranteed breeders. Come and see us. We can suit you.

Correspondence.

News From Pottawatomie County.

Kansas Farmer:

This section of the State has been blessed with refreshing rains during the past three weeks, which have made growing crops look as nice as could be wished for. Corn could not look better, and some fields are tasseling out. We never knew a year when corn fields were as free from weeds as this year. The oats crop will also be very large. Potatoes and all kinds of cereals could not be more promising.

Within the past few days many of the apple trees have shown signs of dying, and fears are entertained that many of our old orchards will be total losses. The tender branches of the trees show the first signs, by wilting, after which they soon turn brown and look as though they had been singed by a fire. Soon the whole tree looks wilted, and the leaves turn brown and have the appearance of being dead. The real cause of this has not been learned yet, but some growers think it the work of some insect at the roots of the trees, as nothing can be found above ground to which the cause could be assigned. If any reader of the FARMER can tell us a remedy for the above we will thank him.

Another swindler is preying upon our farmers, this time being a man who represents himself as agent for the Great Western Mill Company, of Cleveland, O. He represents himself as an old settler of the county in which he is operating, and prevails on the victim to let him put up a windmill on his premises for exhibition, and he will canvass the surrounding country to sell windmills, and will send his customers to see the mill put up, operated, and agrees to give the farmer \$25.00 for each mill sold, for his trouble in exhibiting the mill to those calling to see it before buying of the agent. After this is agreed to by the farmer, the agent produces a postal card, on the back of which is printed the following: "Please ship me by — R. R. one mill with fixtures." He then wants to know how much land and personal property the farmer owns, as he says, "just to show the company that the man in whose care the sample mill is put is responsible." The farmer signs the apparently harmless postal card, and in due time the windmill arrives, and a letter from the agent requests him to pay the freight charges and have the mill put up, which he does; but the promised customers do not come to see the "sample" mill work, but in the course of a few months the farmer receives notice that his note for \$225.00 is in some bank for collection. The maddened farmer goes to see the note, which he feels sure is a forgery, but on looking at it cannot deny that the signature is his own handwriting. It is said that the fraud is played in this way: On the postal card is printed the order for a mill, then a very thin piece of paper is pasted across the center of the card, and underneath the order; the list of property is written on this piece of paper, and the farmer signs his name at the bottom and on the card. The card is carefully steamed (after it is "executed" by the farmer), and the piece of paper containing the list of property carefully removed, after which a promissory note is written on the space thus vacated. We know of several farmers who have been swindled by this agent, and wish to warn others to be on the look-out for him. He deserves the contents of a good shotgun.

G. W. SHEDDEN.
Owaga, Kan., June 28th.

[When will farmers quit signing papers for strangers? If they won't take your word, don't trade.—Ed. K. F.]

From Lincoln County.

Kansas Farmer:

The outlook for our county is good. Late rains have helped out corn, but owing to early drouth considerable ground was not planted. The acreage of wheat harvested is small, compared with former years, but quality will be good.

We now have a railroad in our county. It will be completed to Lincoln Center in a few weeks. Our county seat has doubled in population in the last year, and our county is rapidly filling up with live, thrifty farmers and mechanics.

A Fair Association has been formed, with

\$5,000 capital stock. Work is progressing rapidly on the grounds preparatory to holding a Fair September 21st, 23d, 24th, and as this will be our first Fair at the county seat since 1878, we are anticipating a good attendance. We think that in stock we can compare favorably with the surrounding counties.

The political pot begins to boil, and of course the scum, froth and dirt is coming to the top, but will the boiling purify to do any good?

FARMER.

From Pawnee County.

Kansas Farmer:

Our last rains, I think, have been general, and I have never seen the ground in better condition for growth or work. Corn that was poorly tilled has the benefits and will get its roots down, and if tilled now will make good crops. There is an immense crop planted. Good tilling shows itself in every field. W. W. McCune has the evenest crop of well-tilled corn (thirty acres) that I have seen, and a pasture full of fine, thrifty Poland-China hogs waiting for it, all healthy and in good condition, with a stream of fresh water running from his new Perkins wind-mill into the pasture. Mr. McCune is an inveterate worker. I notice that all the cattle that have fenced lots and fresh well water at their command are far ahead of those herded and watered once a day. Scarcity of water is worse on stock than scarcity of feed.

The question now among the farmers is, what will be done with the hogs? There is no market for them here. Make a good-sized lot, surrounded by five wires with plenty of posts, and make a shelter to keep off the hot sun and cold rains, and get a good Perkins mill and a well near or run the water through pipes into the lot, first into a trough and then on the ground for them to wallow in, and don't be stingy or afraid of wearing out the mill; let it run, and fatten and salt or bacon all your hogs, and you can find a good market for all of them. When Eastern farmers can raise pork and bacon to ship to us by the thousands of tons, we can well afford to raise our own.

Half-starved hogs do not pay, and half-fattened pork is not good, and hogs kept in small, dirty pens cannot thrive or be healthy or make good, sweet, and tender pork. Any kind of stock will pay if taken care of, and none will pay a cent if they are neglected. Plenty of fresh, pure water is the cheapest feed for anything.

I must get round and see Mr. M. Miller's corn and crops. He is the model farmer. The sand land is in the lead again and will continue to be so, three years out of four. Our worst sand lands are making good, comfortable farms, and if worked will soon be comparatively level, and the railroad towns now springing up along the different lines will afford market nearer home of easy access, and do away with the pulling through the soft sand ridges near the rivers. The people of the south side have a bright future in sight, and they all appreciate it. Belfrey, at McKibbin's, will take the lead of the other towns if the proprietors are liberal in disposing of their first lots to actual business men.

W. J. COLVIN.

Newly-Set Trees.

Kansas Farmer:

When trees, either ornamental or fruit, are set out in the spring, they require good attention during the summer after the weather becomes warm and dry. And a failure to give this needed attention is one principal reason why so many fail to get a good growth.

Many will invest considerably in a lot of good fruit trees, will spend time to properly prepare the land in a good condition before setting out, and then take all necessary pains to set out so as to give them a good start to grow, and then pay no further attention to them. If they live, all right, if they die, the fault is laid to the nurseryman.

We may take considerable pains to loosen and mellow the soil when the trees are set out early in the spring, but the hard rains that usually come later on will run the soil together and pack it so hard that it is almost impossible for the roots to penetrate it or the moisture that falls afterwards to soak down so as to benefit the plant. Until the plant gets firmly established and a good start to grow made, the soil must be stirred

sufficiently to keep it reasonably mellow, so that the roots can readily penetrate and the moisture soak down to them. By loosening up the soil two or three times during the spring and then applying a good mulch around the stem of the plant during the latter part of June or the first of July, so that the soil will be kept moist and mellow, there is but very little risk in setting out trees in the spring. After the roots get fairly started to grow they are able to withstand considerable neglect without dying. I prepare to cultivate an orchard for at least four years after setting out, and ornamental trees should be cultivated during two summers after transplanting. And if it is worth while to take pains to prepare the land and purchase the trees, it is certainly worth while to give them sufficient attention to induce them to grow.

N. J. SHEPHERD.
Eldon, Miller Co., Mo.

Anti-Horse Thief Association.

Kansas Farmer:

Seeing inquiries in the FARMER, June 23d, asking about the Anti-Horse Thief Association, I would prefer to reply through your paper to them by saying the A. H. T. A. is growing very fast this year, especially in Kansas, and ere long its good work will be extended in almost every country in the State.

Already the Grand Order of Kansas has issued twenty-five charters to new orders since its last annual meeting, and has fair prospects of granting as many more before its next annual meeting, which will be held at Parsons, Kas., on the fourth Wednesday in October, 1886.

I would also say that the A. H. T. A. of Kansas has jurisdiction over Nebraska and all territory west or south not otherwise restricted. The people out on the frontier can be protected by the A. H. T. A. of this State if they will take steps to organize and become members of our order.

Let the ball roll on, and let all good people who have an interest in abolishing crimes of every description take hold and help on in this good work. In my judgment the penalties attached to petty larceny are entirely too mild for the suppression of crimes of that character. We see our jails filled up in the fall, and continue filled during the winter months; at a great cost to the people, but comparatively with a very small punishment to the criminal. And for grave offense one year in the penitentiary is entirely too short a time to suppress crime. We require a law that will intimidate the offender and punish him in a manner commensurate with the crime committed. This can be accomplished by thorough organization of the order, and by an act of the Legislature changing the Criminal Code so as to make the time of service in the penitentiary longer, and by selecting grand and petit jurors who are in sympathy with good society, and who are in favor of making the punishment severe enough to intimidate all criminals, great and small; also by not feeding the prisoners in the jails better than we feed our own families.

In conclusion I will say, our order is founded on justice, and seeks to bring before the proper tribunal those settling law and order at defiance. It is designed to bind ourselves together in one united brotherhood for mutual protection, and thereby relieve ourselves of relying on paid hirelings as detectives.

Hoping to see the KANSAS FARMER represented at our next annual meeting,

I remain, W. B. RILING,
G. W. Sec. A. H. T. A.
Girard, Kas., July 1st.

Electro-thermal, vapor and hot air baths at 247 Kansas avenue. DR. MCINTYER.

A small Hartford boy quarreled with another, and, having too much conscience to wish any one dead, said: "I wish there had never been a birth in your father's family."

"Two Knife" Apple Parer, doubly fast, doubly durable. "Simplicity" and "Champion" slices in half circles; Champion very fast. Sold by dealers.

It is related that hungry rats devoured a five-pound package of yeast cakes in the freight house in Middletown on Sunday, and a few hours later, when the yeast worked, the noise of popping rats was heard, and their fragments strewed the neighborhood.

Gossip About Stock.

On July 15th, at Reading, Kas., Dr. Eldson will sell publicly his entire herd of 100 thoroughbred Short-horns. This will be a very favorable opportunity to secure some fine stock at low prices on easy terms.

Alex. Berg, of Salina, Kas., advertises this week a public sale to take place at Salina, July 28th, consisting of 75 thoroughbred Poland China hogs and a number of grade cattle. Be sure to attend the sale.

The Santa Fe Railroad Company has recently opened up a new commercial enterprise which promises to become an important one. This is the transportation of fat cattle from California to the Kansas City markets. Already six train loads of these animals have passed through Topeka, and a fair profit has been realized. These are the first cattle ever shipped from that State to such a distance. During the existence of the rate war the Santa Fe carried a great many cars of corn and a good deal of coal from Kansas to California.

By reference to our advertising columns it will be seen that Dr. W. H. H. Cundiff, Pleasant Hill, Mo., will sell on the 5th of August a draft of forty head of choice Short-horns. To all who have seen the Doctor's cattle at the leading fairs of Kansas and Missouri need no further description for the cattle spoke for themselves in the color of the ribbons they wore. But to those who have never seen his cattle, either in the show ring, or at home, we would say, go to the sale. It will well repay you for your visit, whether you purchase or not, as the doctor will not make the usual show circuit this year. He has made a fair divide of his herd, including many prize winners. This, then, is a rare chance for young or old breeders who want some more show animals to fill up any vacancies in their present show herd.

General reports from throughout the State of Texas show that the two great cattle sections of Texas are suffering from drought—one west of the central part of the State and the other in the northwest, extending into the pan-handle. These reports give the most gloomy outlook for cattle and crops in the western part of the State. The grain is completely destroyed, not enough to summer herds and none to winter them. The calves have nearly all died, and the grass is too far gone to be benefited in that section. Ranchmen are moving their herds as rapidly as possible. Trouble has occurred on the trail in New Mexico. About 100,000 head of cattle from the drouth districts of western Texas are traveling northward through New Mexico, headed for Trinchera pass, which has been fortified by local stockmen, and is defended by a large armed force. These immense herds must get through the pass or die, as they are too weak to be driven back into Texas, and a bloody fight is looked for. The cattlemen of northern Texas are anxiously awaiting the outcome of the meeting of the cattlemen at Kansas City, for the purpose, if possible, of inducing President Cleveland, to reconsider the order expelling cattle from the Indian Territory. Texas cattlemen estimate the loss at \$3,000,000 by having their cattle run out of the territory.

In another column may be found the advertisement of Norwood Stock Farm, owned by E. A. Smith, of Lawrence, Kas. Mr. Smith is one of the oldest, best known breeders of Jersey cattle and trotting and road horses in the State. On account of the growth of his business for his place he has concluded to close out all of his Jersey cattle, and hereafter devote his entire time to horse breeding. Mr. Smith writes:

"I have about 15 head of young cows and heifers, the best I ever owned or bred. After 20 years' experience in breeding the Jerseys for milk and butter, this lot is the result of my judgment, and if they are not good ones, I am at fault, for this reserve is what I kept for my own use for profit in the pail and churn. My reason for selling, and the only one, is, I can not manage them properly in connection with my horse breeding business. It takes a double set of help to manage to both branches, and besides it is almost impossible to secure help competent to run a Jersey herd and dairy business. It makes more work for the house than my wife can do; therefore I have concluded to reduce herd down to a family basis, reserving only enough for my own milk and butter. Buyers can take their choice, and I will keep for myself what is left. I have 6 or 8 cows, from 2 to 6 years old, and the same number of yearlings and calves; also the best 2-year-old bull in the West, that I will sell to go with the herd, or singly. The bull is Cattle Club, solid color, and black points, sired by a son of Lebrocq's Prize, and out of a 20 lb. cow. The entire herd is thoroughbred, and most of them Cattle Club, balance Jersey Herd Book Stock. Will make prices very low, for I must sell before winter."

Delinquent Crop Reports.

Here are eleven crop reports that did not reach this office until after our last week's paper was worked off:

Doniphan county.—Wheat good; all cut and in the shock. Oats fair. Condition of corn, No. 1. Prospect for apples, good for all varieties except winesaps; early ones getting ripe. Hay good, except where it was pastured too late. Weather pleasant. Insects, none.

Ellis.—Wheat harvest nearly completed; yield will probably average 15 bushels per acre, Nos. 2 and 3. Oats not cut, light. Condition of corn, first rate. Prospect for apples best we ever had; in fact, this is our first crop of this fruit. Hay promising a fair yield. Weather very fine, not oppressively hot, and yet not damagingly dry. Insects, no damage to report.

Ellis.—Wheat harvest about one-half through; about 12 bushels per acre; berry plump. Oats fast turning; prospects for fair crop. Corn cleaner and better than usual. Apples, first crop to speak of raised in the county; healthy and nice. Hay prospect good. Warm days, cool nights; plenty of rain; everything growing. Insects, none.

Jackson.—Wheat, about half crop; very good, what there is. Oats, good crop. Condition of corn, splendid. Prospect for apples, fine. Hay, growing well. Plenty of rains; good corn weather. Chinch bugs pretty bad.

Kingman.—Wheat, half crop; quality good. Oats, late oats are good; early sown, one-half crop. Corn, excellent. Hay, good. Weather, splendid; plenty of rain. Chinch bugs are doing some injury.

Lincoln.—Wheat harvest mostly done; yield will run from 15 to 20 bushels per acre; quality will be good. Oats very short, not ripe; will not be more than 75 per cent., compared with last year. Early corn good; late, 80 per cent. Apples, but few bearing trees, and those not full, say 75 per cent. Hay, good, 100 per cent. Weather, very fine now for corn; warm, with good rains. Some complaints of chinch bugs in corn.

Montgomery.—Wheat, all done, either by chinch bugs or the machines, all the way from nothing to thirty five bushels to the acre. I have not seen but little. Oats, almost same as what; some too small to cut with anything but a mower; some will go 20 bushels, may average 10 bushels. Corn, none; well worked mostly laid by. Apples, less than half crop; storms blew off half of them, and none too many before. Hay very light; too dry. Weather, pleasant and too dry. Chinch bugs doing considerable damage.

Ness.—Wheat an average; late will be best, since rains. Oats poor, or a failure. Corn superb. Hay will be a good crop; wild, light. Growing weather; have had heavy rains. Insects, none.

Pawnee.—Wheat short; berry fair to good; crop light on high lands and hard soils; yield from 5 to 30 bushels per acre; harvest nearly over. Listed corn has had no advantage over surface planting so far, but its time is yet to come; it came out best last year later in the season than surface planting, and I think it will be the same this season. Oats, short straw and short crop; late rains help late oats very much. All corn that has been tilled is good. Prospect for apples very slim; very few orchards in this section; small fruit good. Hay, short crop, owing to late, cold spring and dry weather; growing fast now. Plenty of rain the last ten days, and no drying winds. Chinch bugs abundant in some localities.

Republic.—Wheat, one-half harvested; chinch bugs have damaged it considerably; it may run 8 bushels per acre. Oats is damaged by bugs, but may make 25 or more bushels per acre. Bugs are in the corn; prospect, 60 per cent. Apples good where there are trees of bearing size. Hay, tame is good; wild, the acreage is still decreasing; quantity will be short. Weather seasonable. Chinch bugs are a crop.

Sumner.—Wheat, of the acres sown, not over 20 per cent. of an average crop; quality not good. Oats, very little will pay for cutting; quality poor. (Wheat and oats are nearly all cut, and wheat in stack.) Corn never better at this season of the year. Prospect for apples, early all off; some winter varieties, such as janets, winesaps, etc., all right. Hay will be very short; tame

hay, none. Weather, all that could be asked at this time; heavy rain night of 18th. Chinch bugs numerous.

The State University.

President Eliot, of Harvard University, recently said that "the State University of Kansas is the first institution of learning in the West, with the possible exception of Ann Arbor." Kansas may receive such commendation from such a source with pardonable pride. The State University, now twenty years old, has far surpassed the older colleges of other Western States. The Collegiate Department comprises eight courses, and is fully abreast, in point of work done, with any institution. Careful work is done in civil engineering. The Law School, thanks to the last Legislature, is now on a footing commensurate with the dignity of the University. Forty-seven young men have graduated from this department, and the attendance of last year was one hundred per cent. greater than that of the previous year. The Pharmacy Department has developed in a highly gratifying manner. A fine body of students has attended its lectures, and the work has been thorough and efficient. The growth of the Schools of Law and Pharmacy has been peculiarly noticeable. The Departments of Music and Art are conducted by competent and popular teachers, and have become prominent features of University work. A Preparatory Medical course extends through one year. A sub-Freshman class is still maintained for those who have no facilities for preparation at home; but those who have such facilities are urged to take advantage of them. Thirty-two High Schools have arranged to do the work necessary for admission to the University, thus forming a great preparatory school, and connecting the University directly with the common schools. The first class graduated in 1873. The Alumni now number two hundred and ninety-three. Two hundred and ninety-one still live to reflect credit on their Alma Mater. The Faculty includes twenty-six professors. Their work has been such, that those who best know have realized the truth of President Eliot's remark. All this is to be expected. Kansas material growth has been phenomenal. Our common schools have kept pace with the State. The average Kansan naturally expects that "our State University, at Lawrence," should rank (as it does) as high as any in the West. All this he sees with the calm serenity of a man who knows that Kansas is the great State, and must necessarily have a creditable State University.

Special Call for a Few Select Canvassers.

The Johnson's Cyclopedia is now offered to the public, having been revised at an extra cost of \$60,000 to its publishers. The demand for this standard work was never greater than the present. Men selling from \$400 to \$500 worth per week. Sold absolutely only by subscription. The position of canvasser is a permanent one, having charge of a district comprising a sufficient number of counties to manage exclusively. Many of these district representatives have held their positions for years. Selling at close figures, less than one-half the price of competing works. Its large sales and quick returns yield to the district representative a very satisfactory remuneration. Men are "not wanted who cannot command good salaries in their own line of business. Nor is this offer to those who commonly answer advertisements. The application, before being accepted, must be made in person. Full reference must be given as to unquestionable business integrity and moral character. But few districts are open. Apply personally during week of July 13th, at 273 Kansas ave., second floor, or address P.O. box 166, Topeka, Kas. CHAS. E. MOORE, Gen'l Manager.

Consumption Can be Cured!

It has been thoroughly demonstrated that the above statement is a fact, patients having been cured, afterward died of other disease, and on examining the lungs scars were found, left by the other disease. This, however could only be done in the early stages, and Compound Oxygen is what did it. This wonderful remedy may be had by addressing "Western Compound Oxygen Company," 247 Kansas avenue, Topeka, Kas.

Kansas Fairs for 1886.

Kansas Fair Association, Topeka, September 28 to October 1.
Western National Fair Association, (Bismarck), Lawrence, September 6-11.
Anderson County Fair Association, Garnett, August 24-27.
Bourbon County Fair Association, Fort Scott, October 8-8.
Brown County Exposition Association, Hiawatha, September 14-17.
Chase County Agricultural Society, Cottonwood Falls, September 29 to October 1.
Cherokee County Agricultural and Stock Association, Columbus, September 7-10.
Coffey County Fair Association, Burlington, September 13-17.
Cowley County Fair and Driving Park Association, Winfield, August 30 to September 3.
Crawford County Agricultural Society, Girard, September 28 to October 1.
Kansas Central Agricultural Society, Junction City, September 21-23.
Decatur County Exposition Society, Oberlin, October 12-14.
Dickinson County Agricultural and Industrial Association, Abilene, August 31 to September 3.
Elk County Agricultural Association, Howard, September 9-11.
Western Kansas Agricultural Fair Association, Hays City, October 5-8.
Franklin County Agricultural Society, Ottawa, September 27 to October 1.
Harvey County Agricultural Society, Newton, September 21-24.
Jefferson County Agricultural and Mechanical Association, Oskaloosa, September 28-30.
Johnson County Co-operative Fair Association, Edgerton, September 20-23.
Pleasanton Fair Association, Pleasanton, September 14-17.
LaCygne District Fair Association, LaCygne, September 7-10.
Emporia Fair and Driving Association, Emporia, July 5 and September 20-25.
Marion County Agricultural Society, Peabody, September 14-17.
Mystic Driving Club, horse fair, Marion, September 29 to October 1.
McPherson County Fair Association, McPherson, September 14-17.
Marshall County Fair Association, Marysville, September 21-24.
Miami County Agricultural and Mechanical Association, Paola, September 21-24.
Morris County Exposition Company, Council Grove, September 7-10.
Nemaha Fair Association, Seneca, September 14-17.
Norton County Agricultural Association, Norton, September 28 to October 1.
Phillips County Agricultural and Mechanical Association, Phillipsburg, September 21-24.
Kaw Valley Fair Association, St. Marys, September 29 to October 1.
Rice County Fair Association, Lyons, October 5-8.
The Blue and Kansas Valley Agricultural Society, Manhattan, August 31 to September 3.
Saline County Agricultural, Horticultural and Mechanical Association, Salina, September 7-10.
Arkansas Valley Agricultural Society, Wichita, September 20-24.
Smith County Agricultural Society, Smith Center, September 15-17.
Sumner County Agricultural and Mechanical Association, Wellington, September 7-11.
Washington County Exposition Association, Washington, September 21-24.
Washington County Live Stock, Agricultural and Mechanical Association, Greenleaf, September 23-30.
Kansas City (Mo.) Fat Stock Show, Kansas City, October 25-30.

A map, published by the faculty of the State Normal School at Emporia, in order to show how the State was represented in the 724 students enrolled during the last year, presents to the mind an interesting picture on an interesting subject. Sixty-nine counties of the State were represented at the Normal, and the map designates the counties, they are colored blue. Beginning at the northwest corner of Smith county on the north line of the State and going south to the southwest corner of Barber county on the south line of the State, we have a line touched on the east by seven counties, five of which are thus colored, and of all the counties east of that line in the State, all but eleven are blue, and of those west of the line six are colored. Two-thirds of the organized counties are represented at the Normal school, and most of the students are preparing themselves for teachers in our public schools. This is an encouraging fact. Nearly every county in the State has one or more persons at the State Normal School fitting themselves for teachers.

A special from Toledo, Ohio, says: "A remarkable case of suspended animation has just been brought to light in this city. Two years ago, Hugh McIntyre, a young Irishman living in Detroit, married the daughter of Mrs.

Cunningham, who resides here. A fortnight ago he presumably died, and his remains were placed temporarily in a vault at Detroit. Eight days after his uncle visited the vault with the intention of moving the body to the cemetery, and was horrified to see the young man sitting up in the coffin, the glass of which he had broken. Young McIntyre was very weak and pale, his hands lacerated and bleeding, but was still alive. He was at once removed and is now recovering."

Send for a sample copy of *Orchard Vineyard and Berry Garden*, a monthly journal devoted to the interests of the fruit-growers in the West. Subscription price only 50 cents per annum. J. R. Hendricks, editor, Cawker City, Kas.

Prof. Cook says sweet clover or mellilot is not to be recommended for field culture, as he finds it of little value—or none at all—for hay or pasture. Alsike is far more desirable. Sweet clover is valuable in the apiary, but if recommended at all it is for planting in waste places, along the railroads or highways, or in half-cleared wood lots.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. BOWMAN & Co., Bank of Topeka Building, Topeka, Kas.

Are You Going South?

If so, it is of great importance to you to be fully informed as to the cheapest, most direct and most pleasant route. You will wish to purchase your ticket via the route that will subject you to no delays and by which through trains are run. Before you start you should provide yourself with a map and time table of the Kansas City, Fort Scott & Gulf Railroad (Memphis Short Route South). The only direct route from and via Kansas City to all points in eastern and southern Kansas, southwest Missouri and Texas. Practically the only route from the West to all Southern cities. Entire trains with Pullman Palace Sleeping Cars and free Reclining Chair Cars, Kansas City to Memphis; through Sleeping Car Kansas City to New Orleans. This is the direct route, and many miles the shortest line to Little Rock, Hot Springs, Eureka Springs, Fort Smith, Van Buren, Fayetteville and all points in Arkansas. Send for a large map. Send for a copy of the *Missouri and Kansas Farmer*, an 8-page illustrated paper, containing full and reliable information in relation to the great States of Missouri and Kansas. Issued monthly and mailed free. Address J. E. LOCKWOOD, G. P. & T. A., Kansas City, Mo.

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The Home Circle.

Rest.

My feet are weary and my hands are tied,
My soul oppressed—
And I desire, what I have long desired—
Rest—only rest.

'Tis hard to toll when toil is almost vain,
In barren ways;
'Tis hard to sow and never garner grain
In harvest days.

The burden of my days is hard to bear,
But God knows best;
And I have prayed, but vain has been my
prayer,
For rest—sweet rest.

'Tis hard to plant in spring and never reap
The autumn yield;
'Tis hard to till and when 'tis tilled to weep
O'er fruitless field.

And so I cry a weak and human cry,
So heart oppressed;
And so I sigh a weak and human sigh,
For rest—for rest.

My way has wound across the desert years,
And cares infest
My path, and through the flowing of hot
tears
I pine for rest.

And I am restless still; 'twill soon be o'er,
For down the west
Life's sun is setting, and I see the shore
Where I shall rest.
—Father Ryan.

Lament not, love, that we are growing old!
Time is a tyrant whose remorseless sway
Sweeps all things mutable to swift decay,
But love immortal is; her anchors hold
When tempests, black with dangers manifold,
Would drive us far from ports of peace
astray.

Let not thin locks, ardent with kindly
gray,
Wake vain regret for loss of rippled gold,
Sun-kiss'd in that glad age when first we met;
Within our hearts love burns serenely yet,
As in funereal crypts, enchanted lamps—
Of time defiant and age-gathering damps—
Defeat the dark with flame that never dies,
Laughing at death through mouldering cen-
turies?
—Traveler's Record.

Sugar and Boys.

I wish some of the ladies would take up the subject of "sugar," sweetening substances in general. Which is the cheapest and most truly economical, twelve pounds of white sugar, thirteen pounds of yellow, or fourteen pounds of brown sugar for a dollar? I should like to see this fully discussed by the able and experienced matrons. To what extent will honey, sirup, etc., take the place of ordinary sugar?

Have just been reading "Our Boys on Sunday" in issue of June 16th. It is quite true that many boys and young men do spend their Sundays in a godless, unreligious way, yet I cannot think that opening of theaters, skating rinks, picture galleries, menageries and concert halls would help them to spend Sunday more devoutly or make them more fit to enjoy the endless Sabbath alone. I do not wish to raise a theological discussion, but I do think that such advice as that of G. E. Stanton should not be passed by without comment. I do not think Sunday is the time to teach drawing, games, deportment, gymnastics, etc. All who know anything of large towns are aware of what constant efforts are continually being made to reach the boys after they are (or think themselves) too old for Sabbath school, by means of Bible classes, interesting lectures, missionary addresses, lending libraries, etc.; but only those who have worked at it know how hard it is to gather them in. Surely, however, we should not do evil on the chance of a good result. An evil it must be to turn the Sabbath into a day of excitement and secular enjoyment. Let the mothers and fathers do more to train their children to respect the Sabbath, and give them suitable reading and profitable amusement. Many of the religious periodicals of the day have questions, etc., on Bible history for which they offer prizes; many boys would be pleased to answer them in the spare time, before and after church, on Sunday. Fathers, mothers, —yes, you fathers and mothers of Kansas homes, always accompany your boys and girls to the house of God; get them into the habit of going, let them feel it is wrong to stay away without a good cause, and as they grow up they will mostly continue the habit. "Train up a child in the way he should go, and when he is old he will not depart from it."
ENGLISHWOMAN.

Bread.

What is good bread? As to its composition, it will be made from flour that is rich in gluten, in phosphates and in starch; as to its making and baking, that is too large a subject for this paper. The proportions of the constituents I have named vary much with different grains, and much even between different varieties of the same grain. The so-called "strength" of wheat, the quality which gives it lightness, is caused by the gluten; in winter wheat this varies from eight to fourteen or fifteen per cent. The flours that are rich in starch, known as "pastry flours," do not easily make light bread. Lastly, the nutritive salts of wheat, the phosphates, are the same as that found in meat, namely, compounds of phosphoric acid, with lime, potassa, iron and magnesia. These constituents make up the peeled wheat grain, and these, with due addition of water and of salt, and with no subtraction from them, as in the ordinary processes of milling, make good bread.

From what are we to make this bread? Not from coarse, unbolted flour; not from bolted flour mixed with bran, such as is often palmed off on the consumer as "Graham flour." Such bread is fit only for the stomachs of herbivorous animals. A good flour must contain all the nutriment and none of the inert silicious coverings of the grain. The best flour, then, is made from a peeled wheat, i. e., wheat from which the outer bran coats have been removed before pulverizing it.

But such flour will not be white. And why? Because it contains the gluten and the phosphates which form the exterior shell of the grain. The gluten and phosphates are essentials of the most nutritious bread.

Now what do we get in the fine white flour which is the popular thing with most consumers? We get a good food, but one which has been plundered of a part of the phosphates and the gluten, and one which is therefore less nutritious and less strengthening than that made of the whole grain, less the siliceous coating, the peeled wheat flour. The whitest flour is mostly composed of starch, and starch, while a valuable food, is not one which is sufficient in itself to furnish the ideal bread. Magendie proved, once for all, that bread made from the entire wheat was more nutritious than that made from refined flour. He fed dogs upon white bread, and they died; he fed other dogs upon bread made from the whole grain, and they lived in health. The peasants of all Europe habitually eat brown bread—that is, bread made from the whole wheat grain—and the use of this bread has extended to a great number of the middle classes, especially in France, where they have a quick sense for what is good to eat. During a recent visit to that country I was struck by the prevalence of brown bread and the absence of white in all places outside of Paris. France is one of the great wheat-producing countries, producing in 1882 nearly three-fourths as much as we did, and the economy of food in using the whole grain is considerable.

With us a number of such flours are in the market: the "W. W. W. Entire Wheat" is such a flour; the flour marked "120" in Professor W. H. Brewer's census report is another; the "Peeled Wheat Flour" is another; the "Steam-cooked hulled A. B. C. White Wheat" is another. The shredded oats and maize, the wheat germ, the wheat flakes and oat flakes of various makers, the steam-cooked "A. B. C. Barley Food," are also excellent preparations, because they are not all starch, and are scientifically prepared.

A certain education of the eye is required to reconcile those who have been brought up on white bread to take kindly to the dark. But entire wheat bread may be made just as light as any other, and it has a flavor which will be preferred to any other by a delicate palate. Some of the cereal foods I have mentioned are partly cooked by steam heat during the process of manufacture, and are by so much the more convenient for the housekeeper; this is the case with some of the breakfast dishes, as the shredded oats and maize. Oats have great nutritive value; and any of the preparations named represent nearly the whole value of the grain. The peeled wheat flour is an article which one could use all his life, and need no other breadstuff except for variety's sake.

The more especially delicate breads, such

as the Vienna Semmel-Brod, famous the world over, are not produced in perfection here; the Austrian grain, the climate, the baking processes, are not the same as ours. "A rich, reddish-brown crust, a delicately shaded yellowish-white crumb, always light, evenly porous, free from acidity in taste or aroma, faintly sweet without the addition of saccharine matter, slightly and pleasantly fragrant, and never cloying upon the appetite"—who that has been to Vienna will forget the "Kaiser-Semmel" thus accurately and invitingly described? In it the necessity and the luxury of cereal food are combined. Nothing can be more delicious than those rolls; they are worth a journey to Vienna. And yet the peeled wheat flour makes a bread which is a better, because a completer, food. I may add that with such well-glutenized flour no night work is needed. The dough, or sponge, must be set immediately after breakfast; the flour is very quick, and the baking should be done by the middle of the afternoon.

I have spoken of the use of cereal foods in health. In certain diseases, as especially in diabetes, it is important to exclude sugar and starch from the bill of fare; but as this implies cutting off bread, as bread is usually made, it becomes to many the most difficult and distressing part of the treatment. Such invalids have a resource in the whole wheat gluten bread, made out of flour from which the starch has been removed. Gluten bread is at once very nutritious and free from the qualities of the ordinary bread that are injurious to the diabetic patient.

What is stale bread? "The stale crumb," says Prof. Horsford, who has experimented upon this matter, "may be regarded as a framework of gluten, coated with glassy, dried starch, not readily dissolved by the saliva. But by heating the watery hydration of the gluten is driven out, the starch is moistened, and the whole crumb, recovering the elasticity of fresh bread, is palatable. On cooling, the water is withdrawn from the starch and restored to the gluten and the bread becomes stale." Now, as stale bread is the most easily digestible, it deserves to be restored to palatability, and this is easily done by re-heating it as we have seen. It should be done in a covered dish, so as to prevent undue loss of moisture. Thus reheated, it renews its youth, but does not resume the qualities that make fresh bread indigestible, it is thus possible to combine the taste of fresh bread with the virtues of stale bread, and the experiment is one that should be familiar in every house where cereal foods continue to be the staff of life.—Titus Munson Coan, M. D., in Harper's Weekly.

A Few Plain Truths.

Egg shells will settle coffee as surely as eggs, but they do not impart the richness and flavor.

In warm weather, refrigerator closets should be washed with soda and cold water once or twice a week.

Pails and all vessels used in chambers should be rinsed thoroughly in cold water, never in hot or lukewarm.

Stale lard can be made sweet by bringing to a boil, with slices of cold raw potatoes thrown in. The impurities will rise at the top and can be skimmed off.

If one quart of milk is set in a cool place for twenty-four hours, it will yield enough cream, well whipped with a Dover egg-beater, to furnish ten cups of strong coffee.

Pulverized borax, sprinkled on shelves and in corners of store-closets, is a safeguard from ants. If pulverized borax is mixed with Persian powder, the powder will be more effective.

Cold water and plenty of it, properly applied, with a fair amount of soap or pearl-ine, is the best thing to clean a kitchen floor. The regulation "boiler suds" is apt to make a kitchen floor greasy.

Feather beds and pillows would be very much freshened and lightened if left out in a drenching rain every spring; they should then be exposed to the sun and air on every side until perfectly dry.

Oilcloths should never be washed in hot soapsuds; they should first be washed clean with cold water, then rubbed dry with a cloth wet in milk. The same treatment applies to a stone or slate hearth.

To preserve goods from moths, do not use camphor in any form. Pieces of tar paper laid in fur boxes and in closets are a better protection. Five cents will buy enough to

equip all the packing boxes and closets of a large house for a year.

Ginghams and prints will keep their color better if washed in water thickened with flour starch. Flour is very cleansing and will do the work of soap in one or two washings in the starch water. This, with the rinsing, will be sufficient, and the goods will look fresher than if washed and starched in the old-fashioned way.

A fine frosting can be made of one cup granulated sugar and one-fourth cup milk, without either egg or gelatine. Method.—Stir sugar into milk over a slow fire till it boils; boil five minutes without stirring; remove from fire; set saucepan in cold water, or on ice, while you stir it to a cream. Spread on cake while it will run. The advantages of this frosting are that it will keep longer than the egg or gelatine frosting, and it will cut without breaking or crumbling. Flavored to suit the taste, it is excellent.—Mrs. Sarah DeW. Gamwell, in Good Housekeeping.

Bitter Bread.

Complaint is frequently made by those who use baking powders that they leave in bread, biscuit, or cake raised by them a disagreeable, bitter taste. This taste follows the use of all impure baking powders, and is caused either by their containing alum (introduced to make a cheap article), by the impure and adulterated character of other ingredients used, or from the ignorance of their manufacturers of the proper methods of combining them. These baking powders leave in the bread a residuum formed of lime, earth, alum, or other deleterious matters, not always, though frequently, tastable in the food, and by all physicians classed as injurious to health. The Royal Baking Powder is free from this serious defect. In its use no residuum is left, and the loaf raised by it is always sweet, light, and wholesome, and noticeably free from the peculiar taste complained of. The reason of this is because it is composed of nothing but absolutely pure materials, scientifically combined in exactly the proper proportions of acid and alkali to act upon and destroy each other, while producing the largest amount of raising power. We are justified in this assertion from the unqualified statements made by the Government chemists, who, after thorough and exhaustive tests, recommended the "Royal" for Government use because of its superiority over all others in purity, strength, and wholesomeness. There is no danger of bitter bread or biscuit where it alone is used.

Secrets of marriage still are sacred held;
Their sweet and bitter by the wise concealed.
—Dryden.

But health consists in temperance alone
And peace! Oh, virtue! peace is all thine own.
—Pope.

The warm weather often has a depressing and debilitating effect. Hood's Sarsaparilla overcomes all languor and lassitude.

Like a blind spinner in the sun,
I tread my days;
I know that all the threads will run
Appointed ways.
—Helen Hunt.

As the sun breaks through the darkest
clouds,
So honor peereth in the meanest habit.
—Shakespeare.

The accumulated photographs of babies that have been named after the President number some 700 and fill three drawers in a White House closet.

Can gold calm passion or make reason thine?
Can we dig peace or wisdom from the mine?
Wisdom to gold prefer; for 'tis much less
To make our fortune than our happiness.
—Young.

A grotesque drawing on an envelope sent by young Clarence Rigby, of Youngstown, Ohio, to a friend on a New York newspaper, was seen by the editor and led to an order for several illustrations, and probably to a permanent and lucrative place on the paper.

Every folly, every pleasure,
All the sirens of our leisure,
From the longing to the tasting of the fruit;
Only yield the rarest sweetness,
From their very incompleteness
In the fever and illusion of pursuit.

For a charm's perpetuation
Works its own extermination,
When possession holds it ever in embrace;
As the soul's diffusive brightness
Will assume evasive lightness,
And may vanish from the dear familiar face.
—C. M. S.

The Young Folks.

"Wock o' Bages."

"Wock o' Bages, keft for me;"—
Through the house the words are ringing,
Uttered by a lisping tongue.
Listen, 'tis our darling singing.—
"Wock o' Bages, keft fore for me,
'Et me hide myse'f in thee."

Papa in his study writing,
As he hears the sweet refrain,
Pauses in his work to listen;—
Waits to catch the words again;—
"Wock o' Bages, keft for me,
'Et me hide myse'f in thee."

In a darkened room he lies,
Yet the same sweet song is singing,
And to our breaking hearts
Peace and resignation bringing.
"Wock o' Bages, keft for me,
'Et me hide myse'f in thee."

"Wock o' Bages, keft for me;"—
"Mama, sing it,—you know how,—
Charlie's—dying,—mama darling,—
Won't you—sing it—for—him—now!"—
"Wock—o'—Bages,—keft—for—me,—
'Et—me—hide—my—se'f—in—thee."

"Rock of Ages cleft for me;"—
'Tis a mother sings it now,
Death has marked her precious baby,
And the damp is on his brow.
"Rock of Ages, cleft for me,
Let me hide myself in thee."

"Let me hide myself in Thee,—
Thou who hast the wine-press trod;
Spare me yet this agony.
He is all we have, O God!
Father, must we drink the cup?
Must we give our darling up?"

"Wock o' Bages"—and our baby
Sang the rest to Christ alone,
As the angels tenderly
Bore him to the great white throne.
"Wock o' Bages, keft for me!"
And he hid himself in Thee.

—Hans Goebel, in Good Housekeeping.

USTER'S LAST FIGHT.

The 25th of June, 1886, it was ten years since the day when brave Gen. Custer and his band of soldiers were massacred on the Little Big Horn river in Montana. The wild Indian region of ten years ago is a civilized country now. Flocks and herds graze peacefully where brave Custer and his men marched to their death that day. The only bit of real wildness in all that country is the National Yellowstone park, set apart by the Government as a "public park, or pleasure ground for the benefit of the people."

It is the strangest river in the world, that Yellowstone, down a branch of which heroic Custer marched with his men. It was explored for the first time in 1870-71. When the surveying party came suddenly to a square mile of hot springs they could only stop and wonder. The terrific rift in the mountains, 3,000 feet deep, some distance further on, with the rapid river flowing through the bottom, was still more wonderful. It was awful. The ravine is so sunless that in broad daylight persons looking up from the bottom can see the stars.

George A. Custer was an Ohio man, born in an obscure country village, New Rumley, in Harrison county, near the Pennsylvania border, in 1839. His ancestry was Pennsylvania German, as far back as the Revolution. In point of fact he was descended from one of the Hessian officers who fought on the wrong side in the American Revolution. There was little of the phlegmatic German temperament in the boy George, however. He was as restless and nervous as a squirrel. He was educated at West Point. A good story is told of him in his senior year, 1861. He was officer of the guard one day, and was put under arrest for not making two cadets cease fighting. He wanted to see which would whip, and was letting the fellows fight it out, when suddenly Gen. Hazen, then a Lieutenant, came on the scene. Custer was put under arrest. His class was allowed to go at once to the seat of war, where officers were so much needed, but Custer was not with them. On the contrary, he pined in a guard house at West Point. He was regularly court-martialed on the specification that "he, the said Custer, did fail to suppress a riot or disturbance near the guard tent, and did fail to separate, etc.; but, on the contrary, did cry out in a loud tone of voice: 'Stand back, boys, let's have a fair fight,' or words to that effect."

While awaiting sentence a telegram came from Washington ordering his release and commanding him to report at Washington for duty. From that on he entered heart

and soul into the war. He won fame as a cavalry leader, and one promotion after another was accorded him till he who had entered the war as a Lieutenant came out a brevet Brigadier General.

The war over, he was ordered for service to the far West and became an Indian fighter. The country rang with his praises. His lamented death made an impression only second to that caused by the murder of a President. Yet so soon are even the greatest and best forgotten that few even remember now when and where bold Custer was killed. To recall the story to their memory these lines are written.

Of all the red foes our soldiers ten years ago had to meet, Sitting Bull, the Sioux, was the wildest. He considers himself a good Roman Catholic Christian, but one who sees his portrait cannot help fancying that his pious beads and medals and crucifix are worn quite as much for ornamentation as for devotion. He has a splendidly strong, though cruel, relentless face. It takes many years to make a good Indian out of such a red man as Sitting Bull. He had a huge head, with hair whose color was brown—very unusual for an Indian. He could neither read nor write, but, strange to say, he kept a journal, which a scout found and brought into the United States army camp. It contained a history of his life, drawn in grotesque Indian pictures. Most of them represented S. B. killing somebody, white or red.

Sitting Bull destroyed Custer and his command on the Little Big Horn river, June 25, 1876. He then fled across the border to British America and annoyed the United States Government people six years longer. It was not till 1882 that he finally surrendered. Even then he has always claimed that he himself did not surrender. It was his son Crowfoot, that at last snatched his father's gun and handed it over to Maj. Brotherton. The boy has some of his father's own grit. His clear-cut, strong face shows him to be a chip of the old block. Sitting Bull was rather pleased at his boy's daring, and let the surrender stand. Unlike the Apache Geronimo, Sitting Bull kept his word, and never made the white people any more trouble after giving up. The long braided hair upon each side is a badge of the Sioux.

Sitting Bull has a pretty little daughter. The little maiden, except for the cruel and merciless strings of wampum in her ears would be as bright and attractive to look at as any of her small white sisters who learn music and go to Sunday school.

Custer's force was divided into three columns on that fatal day, one commanded by Maj. Reno, another by Col. Benteen, the third by Custer himself. The plan was for these three columns to take different routes converging toward the Indian village on the Little Big Horn. The rest of the story may be told in one sentence. Reno and Benteen failed to come to time, Custer and his men reached the village, fought an overwhelming force of Indians till every man died in his tricks. For a mile or more their bodies were found strung along the banks of the Little Big Horn, just where they fell. The particulars of this last fight are as thrilling as the story of Thermopylae. It ought to be put into the school books for American boys to read and draw inspirations from.

The Indian scout Curly, who tells the story, was the only one with Custer who escaped from the massacre. He had been with the leader several years, and was trusted and faithful. He was a Crow. The fight began at 2 o'clock and lasted till sunset. The white men who fought it knew long ere it closed that it was desperate. As soon as Curly saw this he went to Gen. Custer and begged him to let him lead him to a place of safety of which he knew. There was one way of escape whereby a single man, the General, could be saved. Curly pressed the proposition earnestly on his General. Custer's head fell on his breast a moment, as if in deep thought. Then he looked up calmly, and waved the scout away. That was the last time Curly ever looked on the face of his General alive.

In that moment the dashing, heroic cavalry leader chose between life and death. He fought like a tiger himself before giving up his life.

The Indians closed in around him at too close quarters for him to use gun or pistol. Then he snatched his saber. The Indians say that he killed three braves with his saber before he was finally overcome. Then

a chief, named Rain-in-the-Face, who had a mortal grudge at the white leader, shot and killed him. Such bravery as he had shown his wild enemies revered as more than mortal. His was the only body they left unmutilated. This proved that they looked on it with superstitious awe. The Indians say there were more of their braves killed than of white men.

Curly, the Crow scout, escaped alone by the way he had indicated to Custer. He washed his Crow paint off and let his hair down like a Sioux, and thus, undetected, hovered around till the awful fight was over. Then, as much dead as alive with grief and horror, he followed on down the river till he reached the steamboat landing.

It seems that, all the while the five hours' fight was going on, Reno and Benteen were not more than three or four miles away. Reno heard the firing, and knew that his chief was engaged with the enemy.

Reno had been even attacked by a portion of the hostiles flying toward the Custer fight. They came riding like the wind, crouching over the necks of their fleet little ponies, flogging away with their short whips, firing random bullets in the air, and all the time yelling out their "Hi! yip-yip-yip-yip—hi-yah!" The sight seems to have been rather a demoralizing one to Reno and his men.

A monument was erected on the scene of the massacre. The horrible relic hunters are already fast chipping it away. Three Custers, a sister's husband and a beloved, bright-haired school-boy nephew, perished of the hapless family that day. Col. Tom Custer and young Boston Custer were the General's brothers. These were all found in a group close together. The monument contains the names of those who fell, the flower of the United States Seventh Cavalry regiment. It is one of the most thrilling stories ever told in any language.

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A young lady, Miss Frances A. Whipple, of Adrian, Michigan, is believed to have jumped into the whirlpool of Niagara—about two miles below the Falls—and thus ended her life. No reason for the act is given.

We have on file some of the papers read before the State Horticultural Society at Wichita, last week, and they will be presented to our readers in due time. One paper, together with a brief report of the proceedings, appears this week.

Mr. H. A. Griesa, of the Kansas Home Nursery, Lawrence, has our thanks for samples of his excellent Early Harvest and Snyder blackberries and Shaffer's colossal raspberry. Mr. Griesa says he believes Shaffer's is the best raspberry for family use.

The oleomargarine bill has been reported to the Senate favorably by the committee on agriculture. What will be the fate of the bill, we do not pretend to know, but our guess is, that it will be passed with the tax reduced to one or two cents a pound.

A friend writes us from Pavillion, Wabunsee county: "During a heavy thunder shower this evening a son of Mr. Charles Kreiger was instantly killed by lightning, and another son, about 18 years of age, badly injured. The boy killed aged about 14 years.

The outlook for corn in Kansas is very encouraging. In the southern part of the State a great deal of it is tasseled, and the color everywhere is good. Most of the fields are clean of weeds and grass, and up to this time the weather has been favorable. With average weather from this time on, the crop will be enormous.

Some one, fond of figures, has ciphered out the *modus operandi* of making a sea of the desert of Sahara. Naturally, he says, the question has arisen, how long it would take to fill the whole basin of Sahara, and some startling figures are given in connection therewith. Five thousand years, it is claimed, would be required to fill up that vast sea of sand were the water to flow through a passage 100 feet wide and 25 feet deep, with the velocity of four miles an hour. Under the same conditions it would take 4,000 years for the waters of the Mediterranean to fill the valley of the Jordan. With a channel 100 times

greater capacity it would do the work in forty years. At the same rate it would take 400,000 years to fill the Caspian sea to the level of the Mediterranean. Fortunately, it is only a portion of Sahara which can be made into a lake or inland sea, and doubtless there are middle-aged men to-day who will live to see this feat accomplished.

Green Manuring.

Among the best methods of fertilizing land is to plow under green and growing crops. It is universally admitted that for this purpose red clover is the best green manure. Then follow rye, buckwheat, etc. There is a great deal of soil in Kansas that needs this kind of treatment. It loosens the soil and enriches it, besides neutralizing elements that are not favorable to the growth of crops. If a farmer who has alkali land or hardpan, will plow it up deep and put as much green clover in every furrow as he can tramp in and cover with the plow next round, he will find that in the following year he can raise something on that ground, and the oftener he repeats the experiment the sooner he will get the land in good condition.

We are not saying that green manure is better than stable manure, for that is not the case at all; but our object in this article is to impress on the minds of farmers in Kansas that green manuring is a very good thing. It often happens that there is not stable manure enough on the farm to go on every place where it is needed, and sometimes, too, it is not only convenient to use green manure, but it is much cheaper, also, than any other thing attainable for this particular purpose. "A soil is said to be productive in proportion to the amount of humus it contains. Humus is formed by the decomposition of animal and vegetable matter. If a heavy growth of vegetation, grain, clover or weeds is plowed under, a certain amount of plant food is returned to the soil. It would be very natural to suppose that the decayed stem of one plant would contain good, acceptable food for another. If plowing under has been done on a clay soil, six months afterward, by digging down through the furrow, a dark stratum will be found where the weeds fell and rotted. Repeated plowing under of green crops will fill the ground with humus, and restore the worst worn land to fertility."

The *American Agriculturist*, in an article on this subject some time ago, gave one good reason for the practice of crop rotation, that it would afford proper material occasionally for plowing under. Some plants, that paper correctly says, add more fertility to the soil than others, but these are not always the ones that are easiest grown, especially on poor ground, and it is very important to get a good growth to plow under. Rye will grow where no other grain will, and yield a fair crop. Another advantage is its growth in winter. In the latitude of southern Illinois, rye may be sown in November and plowed under when fully headed out in May, and the ground sowed immediately with Southern cow peas and plowed under in July or August. Another sowing of peas will make a partial crop by the first frost, when it can be turned under and the ground again seeded to rye. This makes three crops plowed under in one year.

Farmers in Kansas must learn and practice the rotation system. It is better in every way. The advantage above suggested is only one among many that might be named. There are many others. This alone, however, ought to suggest others to any enterprising farmer. It keeps the land in good con-

dition, always ready to produce a crop. It is practiced by good farmers in all the old States.

A Word About Buckwheat.

Every farmer ought to have some buckwheat of his own raising. For green manuring growing buckwheat is good—next to red clover, some farmers say. The bloom of buckwheat affords good feed for bees. The grain is good food for man and beast. Had it not been for buckwheat raised one year in Pennsylvania when wheat failed, a great many farmers would have been very short of breadstuff. When they saw the wheat was not worth cutting they prepared ground and sowed buckwheat. Any time in July will do for sowing the seed in Kansas. As to the manner of cultivation, Mr. N. J. Shepherd, one of our correspondents, is good authority. He lives in southwest Missouri, and any method of agriculture which is good there is equally good in Kansas. He says that buckwheat may be sown at any time as a catch crop when it is to be used as a green manure, and for this purpose is one of the very best plants we have; it makes an even growth, and on even an ordinary soil often a very heavy one, and can be plowed under, and will aid materially in loosening up a stiff soil or rendering available the fertility left in the ground. It makes valuable bee pasturage, and if sown for grain is valuable either for flour or to be fed to stock.

When sown for grain the soil should be well prepared by plowing and harrowing thoroughly so as to get in a good tilth and then sow the seed broadcast, using from two to three pecks of seed to the acre. Harrow or brush after seeding to cover the seed and then roll carefully; this will aid materially in securing good germination, especially if the soil is dry, as it so often is in July.

As it will not fill until the nights at least are cool, it should be sown as late as possible so as to be able to mature before hard frost. Generally any time before the middle of July will be plenty early. If sown to be plowed under it can be sown at any time either in the spring or summer.

Ordinarily it makes a very rapid growth, and is one of the few plants that will bear flowers, partially matured and ripened grain. It threshes or shatters off very easily if dry when harvested, and for this reason should be cut while the dew is on, but before frost injures the crop. When it can be done the best plan is to thresh in the field so as to avoid wasting as much as possible. This can be done by flailing or tramping. It threshes very easily and can either be cleaned by running through a fanning mill or by the wind, pouring down on to a sheet, allowing the wind to blow the chaff and trash out. The straw is of very little value except for bedding or to cover sheds. The grain should be kept dry and be stirred frequently until it is thoroughly dried out.

If stored in bulk and allowed to remain undisturbed it is very liable to heat and spoil. It can hardly be regarded as a sure crop. Yet often large yields are secured. There is one advantage with it if the grain does not fill so as to be worth cutting, it will pay to plow the crop under so that there need be no loss.

While it is not an exhaustive crop it should not be sown either for grain or as a manure upon land intended for corn as the following crop. In a system of rotation of crops with green manuring to keep or build up the fertility of the soil buckwheat can always be made a part.

The Commissioner of Agriculture says the people of this country eat more pork than England consumes of beef, and

then he goes on to give some interesting figures. He says we far exceed the French quota of all meats in pork products alone, and surpass by a still larger measure every other continental country. Iowa, Missouri and Kansas have larger numbers of swine than all Russia with 60,000,000 people to feed. Indiana and Illinois have as many as Austria and Hungary, and, with Kentucky and Ohio, more than all the swine of the German empire; and Tennessee, Arkansas, and Texas, more than the numbers in France. The wonderful elasticity of this industry is worthy of notice. As with corn, there is never a famine or a glut; a small crop will suffice; a large one only makes greater abundance and lower prices. In both cases the main consumption is at home. No good patriot can wish to export corn from the Missouri to Liverpool at a cost of 25 cents for transportation of a bushel, that may, perhaps, be bought for 20 cents, when pork or lard can be sent from the farm to the same market for a tenth of its home value.

Agriculture in the Cabinet.

The proposition to enlarge the jurisdiction of the new cabinet officer as suggested in an amendment to the bill proposing to have agriculture represented personally in the government, is a good one. It never seemed to us that putting a man in the cabinet to represent one industry alone, even though it be agriculture, was quite broad enough to accord with the spirit of our institutions. But now it is proposed to let the new cabinet officer represent the department of Industry. That covers the whole field of labor; it raises the position from that of a class character to one broad, nearly, as that of the President himself. The farmer stands at the head of the working forces of the country in numbers and in importance. He is the first man among the workers. It is mete, therefore, that agriculture be placed at the head of the industries, that a farmer be placed in the cabinet and that he represent all the hand workers.

Patents to Kansas People.

The following is a list of patents granted Kansas people for the week ending July 3d, 1886; prepared from the official records of the Patent office by Mr. J. C. Higdon, solicitor of patents, Diamond building, Kansas City, Mo.:

Locomotive ash pan—Edgar F. Vaughn, of Topeka.
Coal box—Albert W. Tipton, of Topeka.
Lacing hook for shoes—Geo. Davis, of Leavenworth.
Heating drum—Sherman & Anderson, of Ellsworth.
Machine for cutting and bunching corn—Parker & Longton, of Caldwell.
Horse-releasing device—Wm. H. Neun, of Grenola.
Fence wire tightener—T. C. Histed, of Cherryvale.
Spinal brace—Wm. B. Dewees, of Salina.
Corn planter—Abraham L. Shipman, of Fulton.
Car wheel and axle—Cool & Broadus, of Manhattan.

To Get Rid of Rats.

A writer in the *Scientific American* says he cleared his premises of the detestable vermin by making whitewash yellow with copperas, and covering the stones and rafters in the cellar with it. In every crevice in which a rat might go, he put the crystals of the copperas, and scattered in the corners of the floor. The result was the complete disappearance of rats and mice. Since that time not a rat or mouse has been seen near the house. Every spring the cellar is coated with the yellow wash as a purifier, and as a rat exterminator, and no typhoid, dysentery or fever attacks the family. Never allow rats and mice to be poisoned in the house; they are apt to die between the walls and produce much annoyance.

The Farlington Tree Farm.

The Fort Scott & Gulf Railway Company began a series of experiments a few years ago in tree planting. The company owns a tract of land near Farlington in Crawford county, a station on the line of the road. Upwards of five hundred acres are in trees, some set out in 1877-8, and in other years since. The plan adopted put the trees four feet apart, which gives 2,720 trees to the acre. Mr. Orange Judd, of the *Prairie Farmer*, went to see this Kansas tree farm a few weeks ago, and he published some interesting facts concerning it. We are indebted to him for the facts and figures here used.

The farm was originally a rolling or broken prairie, descending to the south and east, and broken by a somewhat deep "draw," that drains most of it. The soil, while mainly an ordinary prairie, has not a great depth of black earth, and this is in spots too thin for ordinary tillage. We should say it is a fair sample of good, medium and poor soil, hardly up to the average prairie. Some portions are quite dry. On these accounts, the test will be more useful to the country than if made wholly upon a rich bottom, or on the best upland prairie. An Osage orange hedge surrounds the whole outside, with a 30 foot roadway inside of it, and 20-foot roads run through, dividing it into large plats, of, perhaps, 40 to 80 acres, or more. At a little distance the whole appears as a solid mass of green foliage.

The railway company began, in 1877, by setting out four-fifths of an acre of catalpas, and six and three-eighths acres of white ash. The next year (1878) they planted about 46½ acres of catalpas; 8½ acres of Osage orange in mass (not the hedges); ½ acre of butternut, ½ acre each of box elder and pecan, and during 1877-8 nearly 13 acres in a variety of other trees; or in all about 77 acres. In 1879 Messrs. Douglas & Son took their contract and planted thus, omitting small fractions:

| By Douglas | Catalpas | Atlantus |
|--------------|-----------------|-----------|
| In 1879..... | 77 acres..... | 1½ acres |
| In 1880..... | 25½ acres..... | 10½ acres |
| In 1881..... | 133½ acres..... | 1½ acres |
| In 1882..... | 127½ acres..... | 7¼ acres |

| | | |
|---------------|----------------|----------|
| Total..... | 363 acres | 88 acres |
| R. R. Co..... | 47½ acres..... | 1 acre |

| | | |
|--|------------|----------|
| Total..... | 410½ acres | 89 acres |
| Other kinds by R. R. Co..... | 29½ acres | |
| Total planted in trees..... | 529 acres | |
| Roads, hedges, fire-break, house, etc..... | 120 acres. | |

Total land in the farm.....649 acres

The growth of the trees is shown in the measurement given by Mr. Judd.

Four-year-olds—That is, from planting out of trees started from seed the previous year, 120½ acres. These average about 10 feet high, some rather more, and a few on thin soil, 5 to 6 feet. They have generally a clean smooth bark, with a thick mass of foliage at the top, entirely shading the ground. The lower limbs are dead, and mostly fallen off, with those four feet and more up, dying. Majority of trunks quite straight. Diameter, 15 inches from the ground, 1½ to 3 inches, mainly exceeding 2 inches. Ground clear of grass and weeds, without any cultivation this year.

Five-year-olds (1881 planting)—133½ acres. Average height, about 11 to 12 feet, with some variation. The difference in the character and quality of the soil is almost as marked in this and other plats, as it would be in growing corn, though on the whole, in favor of the trees on poor soil. Some specimens reach 4 inches diameter at a foot from the ground: the general run, 2½ to 3½ inches, with some quite small. Ground covered with leaf mold and dead branches; not a weed or any grass. Limbs dying at 4 to 5 feet or more high. Six-year-olds (planted 1880)—25 acres.

Height, 10 to 16 feet; according to soil; generally 13 or 14 feet; with some 18 to 20 feet. Diameter a foot or more above ground, 3 to 4 inches, with some larger specimens, and an intermixture of small ones here and there. On poor soils, some small plats resemble the general size of the 1882. On the better soil, limbs dead up to one's height, and dying above.

Seven-year-olds (planted 1879)—77 acres. Height about 20 feet generally, with the variation as in other plats; 3 to 4½ inches diameter for half or more. These were yearling sets brought from Waukegan, Ill.

Eight-year-olds (planted 1878)—47 acres. Trees 20 to 25 feet high; 4 to 6 inches diameter, with larger and smaller specimens. These show the fullest effects of self-pruning. One can walk round among the clean trunks, most of the limbs having died and dropped off, and marks grown over, up to 8 and 10 feet, with the branches above perishing. We estimate that when on good soil half of these will now furnish fairly straight trunks, often quite clean, 8 to 10 feet long, and 3 to 6 inches in diameter at a foot from the ground; and with two or three more years of growth will supply two fence posts to the tree.

THE ATLANTHUS.

Seventy-four acres set in 1882. These were put on thinner soil. They are higher than the catalpas, of the same age, with straighter trunks generally, and trim themselves a little higher. Diameter, 2 to 3 inches, a foot from the ground, part smaller and some larger.

The Markets.

Monday was taken as the Fourth in most places, and hence no market reports were sent out. Our paper was made up before yesterday's reports arrived. We will say in general terms, however, that there has not been any material change in the markets since our last report.

The business situation is improved. The prospect for fair prices for wheat are improving. From the last issue of *Bradstreet's*, (a trade journal), we copy the following:

The regular quarterly report of stocks of wheat out of farmers' hands, but which have not yet been sold for actual consumption, reveals more clearly than any similar exhibit yet prepared the extent of the draft made during three months last passed on our stocks and so-called invisible supplies. The total visible supplies of wheat in the United States east of the Rocky mountains on April 1, 1886, was 63,615,000 bushels, against 53,574,000 bushels on April 1, 1885, and 34,138,000 bushels on April 1, 1884. New visible-supply points, the growth of interior elevator storage for reserves of wheat in the Northwest, and the rapid marketing of their grain on the part of farmers, all contributed to the increase of the quantity shown by *Bradstreet's* to be actually in sight on April 1 in three successive years. In the three months following there was in 1884 a decrease of nearly 16,000,000 bushels in the visible supply, so that the total dropped to 18,377,000 bushels as compared with 34,138,000 bushels on April 1. The heavy total of 53,574,000 bushels of wheat on April 1, 1885, with then unsuspected reserves behind it, declined in volume only about 5,400,000 bushels during the succeeding three months, leaving the heavy visible supply of 48,196,000 bushels on July 1 last year. But during the past quarter, owing to the enormous home consumption, and the reduced crop of 1885, which much more than offset the decline in the quantities of wheat and flour exported, the very heavy stocks of April last (over 63,615,000 bushels this side of the

Rocky mountains) have shrunk to 35,464,000 bushels, about 28,200,000 bushels, nearly 45 per cent., or at the rate of about 2,180,000 bushels for thirteen weeks past. Notwithstanding this heavy drain we have supplies in sight nearly twice as heavy as were reported July two years ago, and about three-fourths as heavy as were in sight on July 1, 1885. The most notable drain of wheat, back of what are commonly counted as visible-supply points, has been from elevators along lines of railway centering at Minneapolis. Within three months, the stocks of spring wheat have been drawn on to such an extent that the 11,000,000 bushels held there April 1, 1886, (against 10,000,000 bushels on January 1 last,) have decreased 70 per cent., or to 3,000,000 bushels only. The comparative visible supply totals (bushels) reported by *Bradstreet's* at dates under discussion are:

| | 1886. | 1885. | 1884. |
|--------------|------------|------------|------------|
| July 1..... | 35,464,480 | 48,196,067 | 18,377,408 |
| April 1..... | 63,615,661 | 53,574,402 | 34,138,044 |

The large supply of Indian corn of last year is shown in the comparative supplies on April 1 and July 1 this year, last year and year before. The totals (bushels) are as follows:

| | 1886. | 1885. | 1884. |
|--------------|------------|------------|------------|
| July 1..... | 11,791,932 | 6,794,922 | 7,980,890 |
| April 1..... | 19,085,491 | 12,439,614 | 18,339,930 |

St. Louis Wool Market.

Messrs. Hagey & Wilhelm write, under date of July 2d: "London sales of foreign wools have all been for continental use and none for shipment to America. Our domestic clip is fast passing into hands of speculators, while mills with heavy contracts for goods have very small or no stocks and have waited for lower prices before buying. The heavy shortage in the clip, together with the above facts, show that wools cannot go lower in the near future. The demand continues heavier than at any time since the opening of the season, and our daily sales are at the following prices:

KANSAS AND NEBRASKA.

| | |
|------------------------------|-------|
| Choice, ¾ and ¾-blood..... | 24a26 |
| Medium..... | 22a24 |
| Low medium..... | 19a21 |
| Light fine..... | 20a21 |
| Heavy fine..... | 18a20 |
| Carpet..... | 14a17 |
| Common, burry and heavy..... | 16a19 |
| Pulled..... | 16a19 |

Inquiries Answered.

WEIGHT OF HAY.—Please give in issue of July 7th a reliable rule for measuring prairie hay in stack? Will 343 cubic feet weigh a ton 30 days after stacking? Some say it takes 512 cubic feet (8 feet each way). Will not hay stacked from a wagon settle better and weigh more to the measurement than if stacked from a go-devil?

—It is impossible to give a perfectly reliable rule, because there is such a variance in hay weights caused by differing conditions and circumstances. Good prairie hay, well stacked, having settled thirty days, will weigh at the rate of about 500 cubic feet to the ton. Multiply length, width and height, in feet, together, and divide by 500. Hay stacked from a wagon will settle better and weigh more to the measurement than if stacked from a go-devil. The smaller the quantity of hay thrown upon the stack at a time, the more easily is it distributed, the more hay will be packed in a given measurement, and the more compactly will it settle.

Judge David Davis, of Illinois, personally known to a great many people in Kansas, died June 26th. He was so widely known, and so favorably, that a great many letters and telegrams of condolence and sympathy were sent to the family. The last resting place of Judge Davis is but a few steps from the grave of the late lamented Lincoln, at whose monumental dedication he presided. The lot is a large one, almost triangular in shape, and bordered by a stone curbing. At the two entrances are large stone pillars and stone steps lead up to it. In the center of the lot

stands the tall granite shaft, plain and handsome, with the name David Davis upon it. The grave of the Judge's first wife is always decorated with flowers, and in warm weather they are never allowed to disappear, but fresh ones are daily placed. There are five little graves. Three sons and two daughters of Judge Davis are buried beside their mother. David Walker, a relative of the first Mrs. Davis, is also buried there. Judge Davis was laid for his eternal sleep by the side of his first wife, and at the foot of the granite shaft that bears his name.

Book Notices.

LAW OF FIELD SPORTS.—A summary of the rules of law affecting American sportsmen, by George Putnam Smith, of the New York bar. Published by O. Judd Co., 751 Broadway, N. Y. Price \$1.

THE TARIFF.—An instructive discussion of "The food and crude materials provisions of the tariff of 1883," by John L. Hayes, late President of the Tariff Commission. Published by John Wilson & Son, Cambridge, Mass.

WINTER CARE OF HORSES AND CATTLE, by T. B. Ferry, published by A. J. Root, Medina, Ohio. Price 40 cents. This is an excellent little book of 49 large, double column pages, containing suggestions of great value to every stock grower and farmer.

The contents of the *Southern Bivouac* for July are more than usually varied and attractive. The first article is entitled "First Day of Real War," and describes the bombardment of Fort Sumter. The article is written by F. G. DeFontaine, and is illustrated from photographs taken at the time.

FUN.—J. S. Ogilvie & Company, 31 Rose street, N. Y., have just issued a little book of 62 pages, containing bits of fun as made in the language and conversation of children. It is entitled: "Some Funny Things Said by Clever Children." Price 10 cents. It is well worth the price—10 cents—for the amusement of families at home, for it is true that the smartest things are said by little folk.

HOW TO HANDLE AND EDUCATE HORSES is the title of a new book prepared by Prof. Oscar A. Gleason, the celebrated horse-trainer. It is an exceedingly interesting book, and would be useful to any person that has care of horses. The author gives a great deal of his own experience in handling and educating horses, which of itself is of much value to horsemen. The book also contains a brief treatise on the training and health of dogs. Published by O. Judd Co., 751 Broadway, N. Y.

TREATMENT OF DISEASE FROM THE HOMEOPATHIC STANDPOINT.—This is a lecture in pamphlet form by Henry W. Roby, M. D., of Topeka, Kas. Dr. Roby is personally known to the editor of this paper. He is an educated physician, one whose judgment upon a matter which he had examined would be entitled to great respect. The object of this lecture is to prove the reasonableness and the scientific correctness of the homeopathic system and method of treating disease. The foundation proposition is, "Like cures like." So that, as Dr. Roby says, "homeopathy consists in giving in small doses such drugs for the cure of disease as will produce in the healthy human system, in large doses, just such symptoms and phenomena as are found to characterize the disease under treatment." It is an interesting subject well treated. The Doctor covers the field of medicine in a scholarly way.

The "stick" candy which seems to be an indigenous American product, is ordinary "A" sugar, boiled down with water and a little cream of tartar to prevent crystallization. The mass is taken in batches of about fifteen pounds to marble table, where it is kneaded like bread, and the flavoring and coloring worked in. The paste then goes to the "pulling hooks," where for five or six minutes it is pulled and twisted. Thence it returns to the marble table, at one end of which there is a metal plate, kept hot, on which he works the candy into its final shape. Stripes are pressed into the batch, two feet long and a foot thick, and it is then drawn and twisted out till it is the proper size of the penny "stick," the right length of which is clipped off by huge scissors.

Horticulture.

THE IMPORTANCE OF HORTICULTURE AS AN INDUSTRY.

A paper read before the State Horticultural Society meeting, at Wichita, Kas., June 29th, 1886, by A. Willis, of Ottawa, Kas.

It seems well now and then to look over the ground we have traveled and see how far we have come, to call to mind the obstacles that have hindered our journey, to look around us and see with whom we are traveling, to study for a time the lessons our successes and reverses should teach us, hence these meetings.

We come here and go there from year to year to extend and receive kindly greetings, to rejoice with those who rejoice and weep with those who weep, to gather lessons of wisdom that shall add to the measure of our success from those who have achieved success, and to take warning from the rocks and snags from which others have suffered loss, perchance were shipwrecked.

Is there nothing in this? How many in this place have to-day, with a smile on the face and joy in their heart, clasped hands and said, brother and sister, who were a few years ago strangers, and who, but for these meetings, would be strangers to-day, and to the industry of horticulture is this all due. We will for a time consider this subject as it relates to Kansas, for this is our home; here our work has been done, and here our work will be done, and here by success will we give honor, or by failure suffer shame.

Thirty years ago, within the borders of Kansas, the industry of horticulture consisted of gathering wild berries, hawthorns and persimmons from the woods, here and there maybe some Indian who had a nearer approach to civilization than his fellows, had planted a few seedling apple trees, and this was all, and it was many years after this before any of the magnificent displays of fruit, for which Kansas has since become famous, and which fill the heart of every Kansan with pride, had been made, while the work of our State Horticultural Society and its auxiliaries, that have done so much to secure to Kansas the high place it holds among its sister States, has nearly all been done within half of that time.

But about thirty years ago a few of those sanguine horticulturists began to suspect the great American desert was perhaps not so much of a desert after all, and then with the word fail blotted out of their dictionaries and "never give up" for their motto they came and amid toil and hardship, privation and adversity, digged and planted and laid deep and solid the foundation of Kansas horticulture, the foundation on which we are to-day building with hope and success. Some of these noble pioneers sleep to-day beneath the bosom of mother earth, and we uncover our heads and do reverence as we speak their names or tread the hallowed ground where they lie, but many of them are still with us, and we sit at their feet and listen with pleasure and profit to their words of wisdom and encouragement.

Does the industry of horticulture mean nothing to them? They spelled out amid poverty, toil and misfortune the lessons that are given us as certain guides to success, they trod an unknown path in an unknown land. They could know nothing except as the result of experiment in unknown fields and under unknown conditions, but with mental resources that devised new plans when old ones failed, and a faith in ultimate success that loss and disaster could not shake, they toiled on, they marked the shoals and quicksands

that so nearly wrecked them as well as the bright spots in their path, the one as a warning, the other as a beacon to guide them to brighter success in the future. Such was the beginning, but Kansas horticulture has been a child of lusty growth, and to-day stands before the State an industry that produced marketable products in 1884 to the value of about \$2,000,000, it is believed, beside what was consumed by the producers, though in some of the items named this is not stated, in others it is.

In 1875 there were over 400 persons engaged in the various departments of horticulture. Amount of products not stated, and if the increase in this calling has been in proportion to that of other callings in the State, we may safely conclude that there are more than 1,000 men actively employed to-day; besides these 1,000 men who give their time to this work, most farmers devote a part of their time to the cultivation of orchard and garden, and flower gardens; the same is also true of large numbers of tradesmen, mechanics, professional men, and laborers; the amount of time thus employed is large, and the products, whether we consider its money value, its economic value, as a food, or its influence on the public health and comfort is beyond calculation. This is Kansas horticulture to-day. To-day it supplies large quantities of fruits, small and large, fruit trees, vegetables and flowers, to consumers from the Atlantic coast to the Rocky mountains. These products carry with them a wealth of comfort and luxury beyond calculation to consumers, and bring millions of money in return each year to the producer. It furnishes employment for a large amount of labor and capital. It plants shade and shelter for man and beast. It decorates roadsides, school grounds, church yards, private grounds, cemeteries, and public parks. It has made large advances toward transforming the treeless plains of Kansas into diversified landscapes; it has had such beneficent influence on the climate of Kansas that from its former reputation for long drouths and burning plains it is rapidly becoming, in climate, as humid and favorable to the production of the fruits of the earth as the most favored portions of our fair land. Its influence on the education of the young is to be compared with the influence of beauty and civilization on the savage. The industry of horticulture to-day is a stalwart youth with a robust, healthy body and a studious, inquiring mind and a boundless ambition.

He sees the difficulties and discouragements that beset his way, but with sunny skies above, and a fertile soil beneath, the idea of failure does not occur to him as among the possibilities, and with the experience and success of his fathers for his guide he has determined to join the grand forward movement of the century and march shoulder to shoulder with his fellows in other callings to success in new enterprises and achievements. Do you think we will fail? I will make a prophecy. The day will come when every hilltop will have its grove, and every home its orchard and garden and flower gardens, the road sides, school grounds, church yards, cemeteries, and public grounds be clothed with verdure and beauty; knowledge and a love of the beautiful shall fill the minds of the people, as apathy and ignorance now fill the minds of the masses; this is a great work and my prophecy looks like a stretch of the imagination, but behold the beginning, the progress, and then know that we are still in the beginning, and you will see we have reason for hope and confidence.

The day will come when instead

of 1,350,000 people, Kansas will have 20,000,000 of people. Fruits, vegetables and flowers must be provided for all these, and for the millions beyond our borders that will demand the products of our calling; there must be pleasure grounds, orchards, gardens, and timber plantations for all these people, and the horticulturists of Kansas must arise in their might and do this work. Our calling is not one of ease. The Almighty Creator who gave us this beautiful land and commanded the earth to yield her increase has also indelibly stamped on the hearts of every horticulturist a command to dress and keep this land so kindly entrusted to our care. He has also commanded us to teach our children—the people—to assist each other, and all who will, to beautify and make production the trust committed to our care.

But some one says, these horticulturists dig in the dirt and get their clothes soiled and look rough, and are of little influence and low social standing. Well, my friends, the horticulturists of Kansas are not all fools, nor are they all poor. It may be few have accumulated large fortunes, but many have, in the fear of God, trained up sons and daughters to become honest men and pure women who can say they are the equals, if not the peers, of any in the land. Many have accumulated respectable properties. They have raised the trees and the vines and the small fruits; they have given their labor and means to discover and promulgate the laws that govern the propagation, cultivation and growth of the various fruits, flowers and vegetables; they have produced a literature the sage can study with profit, while few scientists have given to their fellow men so much helpful, beneficent information as those who have devoted their researches to horticultural science.

Already in this young State a goodly number of horticulturists have achieved respectability, while in our county not a few have made their names to be loved and cherished where a love of the beautiful dwells, and over the graves of those who have toiled in this calling because they loved it, and the nation weeps to-day as it weeps for a few of its loved and lost.

Do you want to know the value of the industry of horticulture in Kansas? If so, then count its days of labor, gather up its tears, pains and suffering; figure up the labor necessary to bring wealth out of poverty, examine the discouragements, the losses, the wrecks and misfortunes that lie along the path so far come o'er, and you will find the sum total to be huge indeed, but it has been paid; the tears are not all dried away yet, nor the broken hearts healed. Yes, figure up the sum, for it is worth all it cost, and the industry of horticulture is to-day one of the most precious possessions held by our rising young commonwealth. Some judge of the value of an article by what it is, what it can show, or the amount of gold it will bring. Very well, let us see what this calling does possess. To-day it possesses a thousand intelligent men among its followers in Kansas alone, many of whom have elegant homes and fine tributary properties. They are leading men in the communities where they dwell. They educate their children and take pride in doing so. They contribute generously for the support of charitable, religious and educational enterprises, and the products of their labor furnish employment to thousands, and enter into many of the economic industries of the State and country, also doing its full share in the cultivation of the æsthetic and refined attributes of our better nature.

Some would estimate the value of an

article by its prospects for the future, and having made one attempt at prophecy in this paper as to the future of this industry, I now give a parable: Once a little boy found an acorn, 'twas small; it looked like a little marble in his hand—a dead and an useless article, but his mother said, "My son, plant that little seed, and it will grow and become a tree;" so in the garden he planted it, then departed or went away. Next year he returned, all forgetful of what his hand had done, but his mother said, as she wended her way through the garden one pleasant evening, along with her boy, "See the little tree which has grown from the small acorn you planted a year ago; now cultivate, water, nourish and protect it, and one day you will see a tree." The boy grew, but the young oak met with misfortune; hail came and scarred its bark, cattle hooked down its branches, and one day a thoughtless man essayed to make it a walking stick, but it was spared, and through accident and misfortune it lived, and its young master loved and cared for the same; it grew and he grew, became a man, and the tree grew, too, becoming an oak of fine development. This is Kansas horticulture of to-day. But the man grew old, infirm, gray and white-haired; dim eyes came to him, and with feeble steps he tottered to the grave. On the other hand this tree grew, became very large, beautiful, brave and strong, with foliage in ample diffusion. The storms beat upon it, the wintry blast spent its fury upon it, still the tree grew; and laughingly, as it were, put forth its green leaves, blossoms came, seed grew and matured, as the gladly welcome sunshine and gentle showers attest. Birds sang among its branches, and the cattle rested in its cooling shade, children played beneath its branches, and men, generation after generation, came and went, still the oak grew, laughed at the storm, and rejoiced in the sunlight, and stretched out its strong arms to shelter and protect yet new generations of men. Friends, this acorn is Kansas horticulture, and the pioneers in this calling resemble the little boy; we, to-day, the men. Soon we shall sleep, and our children will follow on, thus ever, but the industry of horticulture will grow, and each new year will find it spreading, or growing, and scattering its blessing over broader fields, and generations of men yet unborn will rise up and follow the calling hallowed by the memories of those who, from choice, took upon themselves this occupation in order to make their lives a blessing to their fellow-men.

Proceedings of the Fruit and Vegetable Growers' Association of United States.

The Fruit and Vegetable Growers' Association of the United States met at the Neil House, Columbus, Ohio, June 17th, 1886. The meeting was one of unusual interest. The various papers read all embodied deep thought and research. The most interesting discussions were on the value and use of fruits, and regarding the best methods of preparing fruit for market and preserving it for family use. The opinion seemed prevalent that evaporated fruit was bound to obtain and hold the highest position in public favor. Not only is evaporated fruit superior in appearance, in flavor, in healthfulness and in keeping properties, but it commands a much higher price; ordinary dried apples are worth from 2 to 2½ cents per pound, evaporated apples from 8 to 10 cents. Common dried peaches are worth from 3 to 5 cents, evaporated from 18 to 22 cents. Ezra Arnold, the Illinois fruit-grower, presented drawing and specifications of a cheap evaporator made and used by himself, with which he has had better success than with the

more expensive dry-houses and evaporators. He evaporated apples in two hours, strawberries in three hours, peaches in two hours, cherries in two hours, corn in two hours, and all kinds of fruits proportionately quick. The evaporator is a marvel of simplicity and excellence, and can be made by any one at a very trifling cost. By its use millions of dollars can be saved to the producer and consumer each year. There are thousands of families that dry large quantities of fruit annually in the old-fashioned slow way, and sell it at the old-fashioned low price, when they could with but little expense make an evaporator and evaporate five times as much fruit and sell it for five times as much per pound. There are thousands of families in the cities that can at times, when the market is glutted, buy fruit for less than the cost of production, and with an evaporator can prepare in a few days sufficient fruit for a year's consumption, and at one-tenth the usual expenditure. Mr. Arnold said he did not intend to make or sell evaporators and would consign to the Association his right and title to his evaporators provided the Association would procure cuts to illustrate the different parts and distribute gratuitously among the farmers, fruit-raisers and consumers of the United States complete illustrated directions for making and using this evaporator. On motion, Mr. Arnold's proposition was accepted, and the following resolution adopted:

Resolved, That the Secretary of the Fruit and Vegetable Growers' Association be authorized to inform the people through the leading newspapers in each State, that illustrated directions for making and using Arnold's fruit evaporators can be had by addressing our Secretary, W. Orlando Smith, P. O. box 104, Alliance, Ohio, enclosing stamps for return postage, and that the Secretary draw on the Treasurer for the necessary amount to defray expense of wood cuts, printing, etc. On motion a vote of thanks was tendered Mr. Arnold for his valuable gift to the Association. On motion a vote of thanks was tendered the press throughout the country at large for the courtesies extended to us in publishing the call for the meeting of our Association, and for publishing the proceedings of our previous meetings. On motion the Association adjourned to meet at the Southern Hotel, St. Louis, Mo., December 9th, 1886, at 10 a. m. W. ORLANDO SMITH, Secretary.

The Poultry Yard.

Wake Up, Ye Sleepers!

Kansas Farmer:

I am a constant reader of the FARMER and usually turn first to "The Poultry Yard." Having a few of these animals myself, I always feel an interest in whatever might be said by those who have had experience in the business. I appreciate that fancy poultry raising is becoming a very extensive and very important business. But I am surprised to find nearly every week a clipping in "The Poultry Yard" from some Eastern journal. How is this? Cannot your Kansas readers and Kansas fancy poultry breeders furnish you enough literature of that kind for your columns? By referring to page 3 of the FARMER we see you are advertising for a good many fancy breeders in the State. These are the parties I, for one, would like to hear from. Kansas has as well-experienced men in the poultry business as the East, and it sets hard with me to see the Eastern fanciers writing our poultry articles. If I want Eastern literature I want to subscribe for an Eastern journal, for then I will get it fresh. I always prefer fresh to second-hand things, even in literature. The idea of a credit at the bottom of an article hurts it in my judgment. When I see this I usually pass it over, for it strikes me as something stale that I have read before. Kansas is as good a field for poultry shows and exhibi-

tions as any in the Union. The reason why we have none here is because there has not been enough enthusiasm by those who are in the business.

I would like to see a few in the State wake up, and through your "Poultry Yard" arouse an interest in the business greater than we see now. Show me a State that is taking as little interest in the business to-day as Kansas, if you can. Every State has its poultry association, and once a year hold exhibitions, where the very best breeds are shown to the public. We hope from this on we may be able to read in the FARMER original letters on poultry, written by your Kansas readers in the poultry business.

JOHN A. BRANSON.

Clifton, Kas., June 26.

[Mr. Branson strikes a good key, and we hope he will strike it again. We have often wondered why so few Kansas poultry men and women take interest in this department enough to impel them to write occasionally for our poultry columns. But Mr. Branson need not wonder, for if he will but take his own case he will understand why so much of our poultry matter is clipped. He is a constant reader of the FARMER, he says, and yet this is the first time even he has "taken up his pen" to help. Now that he has done it, we thank him heartily, and hope his excellent advice will be followed.—ED. K. F.]

Dressing Fowls for Market.

Opening the door of the coop, seize a fowl by one or both wings. Be careful not to injure it when passing through the small door. Chickens are frequently injured in this way, as their skin is very tender. Bring both wings together over the back, and taking the fowl firmly by them with one hand, place it between your knees, where you hold it as in a vise, with its head over the pail. This liberates your hands, and allows you to do the fatal sticking. Replace the knife, and before releasing the fowl from between your knees, secure a firm grip on both wings with one hand and on both legs with the other. While in this double grip, hold its head over the pail for a moment to receive the bulk of the blood. Fold the wings over the back in such a manner that they will be as far removed from the breast as possible. Now seat yourself, placing the fowl, breast up, with the head between your left leg and the outside of the tub, which enables you to hold it firmly in that position. Remove the breast feathers instantly, then reverse the fowl, folding the wings over the breast, as you did over the back, and remove the feathers from the back and neck, leaving the legs until last, as there is less danger of tearing the skin here than elsewhere.

In removing the feathers do not pull hard enough to tear the skin. By noticing an experienced picker you will occasionally see his fingers slip off from the feathers, leaving them still on the fowl. This is because they have set. If he pulled harder he would tear the skin. If the feathers are not removed instantly they often set, and then the task is a slow one. Having "roughed off" the fowl, you next pinfeather it.

When dressing poultry in warm weather do not expose them to flies while on the bench, but keep them covered with paper or cloth if necessary. Carry the dressed birds into a cool cellar, and having them securely tied together by the legs in pairs, suspend them from poles placed there for that purpose. When thus pairing them, use judgment and good taste about it. Do not join a ten-pound and a five-pound hen together, nor tie a plump Plymouth Rock three-pound chicken with a thick-legged Brahma of the same length.

Do not tie a yellow-meated fowl with one as blue as indigo.

Do not neglect to remove your feathers from the picking-house every day. If well cared for and kept sweet, they will usually bring a price which will pay for saving. Your pail of offal must either be removed to a distant place for deposit, or else buried beyond the reach of your fowls or of skunks. If allowed to remain unemptied, maggots are bred with surprising rapidity.

If your poultry is intended for any market with which we are acquainted, never scald it. Wet-picked poultry is not wanted in Boston market, and will not sell for anything like a fair price. To sell a lot of scalded stuff, bids must be solicited from proprietors of second-class boarding-houses or cheap restaurants.

Having dressed your fowls, be sure that the animal heat is entirely out of them before packing, or they will surely spoil. For some markets not only must the poultry be properly picked and drawn, but the head must be removed as required by statute. Omitting to do this subjects the seller, or any one offering it for sale, to a heavy fine. Where such a law exists, as in Massachusetts, many fine pickers, after cutting off the head, draw down the skin of the neck and remove a little more of the neck bone. Then draw the skin over it again, and tie it neatly.—Poultry World.

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THE OLD AND RELIABLE SYRACUSE NURSERIES.

With the choicest Stock of their Specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all Young, Thrifty and Well Rooted. Also a very superior assortment of GENERAL NURSERY STOCK, both FRUIT and ORNAMENTAL, including all the popular ORNAMENTAL TREES, SHRUBS and ROSES. All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their Orders for the coming Fall. [When writing always mention this paper.]
SMITHS, POWELL & LAMB, Syracuse, N.Y.

THREE ILLS
DYSPEPSIA, SICK HEADACHE, CONSTIPATION.
Grab Orchard Water
A Remedy for all Diseases of the Liver, Kidneys, Stomach and Bowels. A positive cure for Dyspepsia, Sick Headache, Constipation. Dose, one to two teaspoonfuls. Genuine Crab Orchard Salts in sealed packages at 10 and 25 cts. No genuine salts sold in bulk.
CRAB ORCHARD WATER CO., Prop'rs. SIMON N. JONES, Manager, Louisville, Ky.

DR. JOHN BULL'S
Smith's Tonic Syrup
FOR THE CURE OF
FEVER and AGUE
Or CHILLS and FEVER,
AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY and PERMANENT cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of KENT'S VEGETABLE FAMILY PILLS will be sufficient. Use no other.

DR. JOHN BULL'S
SMITH'S TONIC SYRUP,
BULL'S SARSAPARILLA,
BULL'S WORM DESTROYER,
The Popular Remedies of the Day.

Principal Office, 831 Main St., LOUISVILLE, KY.

TOPEKA
Medical and Surgical
INSTITUTE

This institution was Established Fourteen Years Ago, and is incorporated under the State laws of Kansas. During that time it has done a flourishing business and made many remarkable cures. The Institute is provided with the very best facilities for treating every kind of physical deformity, such as Hip-Joint Disease, Club Foot, Wry Neck and Spinal Curvature, having a skilled workman who makes every appliance required in arthroplastic surgery. Incipient Cancer cured, and all kinds of tumors removed. Diseases of the Blood and Nervous System successfully treated. Nose, Throat and Lung Diseases, if curable, yield readily to specific treatment as here employed. All forms of Female Weakness relieved. Tape-Worm removed in from one to four hours. All Chronic and Surgical Diseases scientifically and successfully treated.

PATIENTS TREATED AT HOME.
Correspondence solicited. Consultation free. Send for circular and private list of questions.
DRS. MULVANE, MUNK & MULVANE,
No. 86 East Sixth street, TOPEKA, KAS.

RUPTURE

RELIEVED AND CURED
Without any operation or detention from business, by my treatment, or money refunded. Send stamp for Circular, and if not as represented will pay railroad fare and hotel expenses both ways to parties coming here for treatment.
DR. D. L. SNEDIKER,
Emporia, Kas.

GLAD TIDINGS FOR MOTHERS, who would escape the pains and dangers of child-birth. Sent free. Also, "Diseases of men," for men only. Address
DR. STAINBACK WILSON, Atlanta, Ga.

CAN YOU DO IT?

Every one dividing the white space in the square in four sections, each the same size and shape, and inclose 15 cents, will get one of these PRIZES: 50 Sheets Note Paper; 50 Envelopes; 25 Amateur Papers; 25 Nice Cards. All of above, 50 cents.

Small Filing Outfits. Circular free.
R. L. ZERBE, 188 W. Fifth St., CINCINNATI, O.

The Busy Bee.

A Strange Fact in Regard to Queen Bees.

I wonder if others have queens faint away and come to again, as some of ours have done. Last summer, in looking for a queen we could not find her in the hive; but when about closing up I saw her lying quietly on the alighting board, where some of the combs had been set. I picked her up in my hand, and she appeared dead—no life at all. My first thought was of tossing her away; but the next thought was to drop her in the hive among the bees. I did so, and in a week I examined the hive and she was laying all right, but showed signs of a little weakness. She was a young queen, fertile only ten days or so, but she has not kept her hive so well filled with brood as some others, and now she is but one year old. I think I shall give the colony a more vigorous queen.

About five years ago, on looking through a hive for a queen I could not find her. I looked on the bottom board, and there she was, apparently dead. I took her up in my hand; and as I wanted to save a dead queen to show to visitors, I told the attendant to lay her on a big box a rod away, until I went into the house. What was my astonishment, when, on going for my dead queen, to find her surrounded with two or three dozen of her own bees (I suppose), all doing homage to her, their heads mostly all turned toward her, and caressing her with their antennae. I put her back in the hive, and she was, to all appearance, a well queen for a year or more.

Again, in swarming time my wife caught a queen in a cage with a few bees, and laid them in the sun, intending to take care of her soon, but forgot her for two hours or so; when found she was apparently dead. I placed her in a hive, and she revived and lived to do good service.

One fall, after uniting several nuclei, we forgot a queen and a few bees we had hunted out and did not care to save, but disliked to kill her, so we put her in a cage and laid it on the ground, intending to put her on top of brood frames in some colony, thinking possibly we might find a hive queenless. She lay out all that night; we had a hard white frost, and next morning I found that she and all the bees would shake round in the cage as if dead. I put the cage on top of a colony of bees for a day or so, and on going to it all were as lively, apparently, as if nothing had happened.

Our bees have wintered very finely indeed; those out-doors are at this date at least one-third stronger than those wintered in the cellar. All were packed in straw, but they were one-third stronger and better colonies last fall. We had several nuclei quite weak last fall. We crowded the bees on to well-filled combs, and packed with straw all around, and put in the cellar. They all wintered, and to-day bid fair to make fine colonies in a month or so.—L. C. Axtell, in *Gleanings*.

Old Governor Tod, of Ohio, was a great friend of Lincoln, and when the latter became President he tendered Tod the position of Secretary of the Treasury, but the old gentleman wouldn't have it. He was finally persuaded to accept a foreign mission. One time when the Governor was in Washington he called at the White House, and, in the course of conversation, Mr. Lincoln said to him: "How is it, Governor, that you spell your name with one D? Now, you know, I married a Miss Todd, and she, and all her relatives, so far as I know, spell their name with two D's—T-o-d-d." "Well," replied the old Governor, who had a high, squeaky voice, "I know, Mr. Lincoln, that a good many Todds spell their name with two D's, but you must remember that God spells His

name with one D, and what is good enough for Him is good enough for David Tod."

A French geologist, Mons. de Lapparent, lately called the attention of the Paris Geological Society to the effect gravitation has in heaping up sea-waters about the land. The continents are thus all situated at the tops of hills of water; and in crossing the Atlantic the ship has first to go down hill, then to cross a valley, and finally to climb another hill. The calculation has been made that in mid-ocean the surface may be more than half a mile (1,900 meters) below the level it would have if the continents exerted no attraction.

Governor David S. Crandall, formerly editor of the Lockport *Courier*, used to tell a story of the great meteoric shower which fell in November, 1833. He was at that time living upon his farm, a few miles distant from Lockport. Among the men he employed was a chore-boy twelve or fourteen years old. On the night referred to Mr. Crandall was engaged in writing after the rest of the family had gone to bed. Seeing through the window the shower of meteors, he aroused his wife, and then the boy, requesting them to come to the door. The boy was at first absolutely struck dumb with astonishment, think that all the stars in the heavens were falling through space. After a little he turned to the North star, and his courage came back. "Gosh!" he exclaimed, "the old dipper hangs on yet, don't she?"

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists. \$1; six for \$5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

HEADACHE

POSITIVELY CURED.

Thousands of cases of sick and nervous headache are cured every year by the use of Turner's Treatment. Mrs. Gen. Augustus Wilson, of Parsons, Kas., who was appointed by the Governor and State of Kansas lady commissioner to the World's Fair at New Orleans, says: "Turner's Treatment completely cured me, and I think it has no equal for curing all symptoms arising from a disordered stomach or from nervous debility. For female complaints there is nothing like it."

To the Women!

Young or old, if you are suffering from general debility of the system, headache, backache, pain in one or both sides, general lassitude, bearing-down pains in the abdomen, flashes of heat, palpitation of the heart, smothering in the breast, fainting sensations, nervous debility, coughing, neuralgia, wakefulness, loss of power, memory and appetite or weakness of a private nature. We will guarantee to cure you with from one to three packages of the treatment. As a uterine tonic it has no equal.

Nervousness!

Whether caused from overwork of the brain or imprudence, is speedily cured by Turner's Treatment. In hundreds of cases one box has effected a complete cure. It is a special specific and sure cure for young and middle-aged men and women who are suffering from nervous debility or exhausted vitality, causing dimness of sight, aversion to society, want of ambition, etc. For

Dyspepsia!

Strengthening the nerves and restoring vital power this discovery has never been equaled. Ladies and gentlemen will find TURNER'S TREATMENT pleasant to take, sure and permanent in its action. Each package contains over one month's treatment. The Treatment, with some late discoveries and additions, has been used for over thirty years by Dr. Turner in St. Louis, in private and hospital practice.

Price Turner's Treatment, per package, \$1; three packages \$2, sent prepaid on receipt of price. Thousands of cases of diseases mentioned above have been cured with one package, and knowing as we do its wonderful curative effects, the Treatment having been used in private practice for over thirty years in St. Louis, we will give the following written guarantee: With each order for three boxes, accompanied by \$2, we will send our written guarantee to refund the money if the Treatment does not effect a cure. Send money by postal note or at our risk. Address E. L. Blake & Co., Sixth and Market Streets, St. Louis, Mo.

HAGEY & WILHELM,

W O O L

Commission Merchants

ST. LOUIS, MO.

REFERENCE:

Boatmen's Bank, St. Louis; Kansas Farmer, Topeka, Kas.; First National Bank, Beloit, Kas.; Exchange Bank, Beloit, Kas.

Full return made inside of five days from receipt of shipment.

WOOL

A. J. CHILD,

209 Market Street, St. Louis, Mo.,

Pays particular and personal attention to wool shipment. Full information about the preparation of Wool for Market, Shipping, and St. Louis charges for handling and selling, furnished upon application.

Correspondence solicited.

VIRGINIA FARMS Mild Climate. Cheap homes. Northern Colony. Send for circular. A. O. BLISS, Centralia, Va.

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The Kansas Live Stock Insurance Company,

—OF—
TOPEKA, KANSAS,

Insures Live Stock Against Death

BY DISEASE OR ACCIDENT.

Incorporated under and complied with all the laws of the State of Kansas, furnished bonds as required, and received certificate of authority from Insurance Commissioner to do business. Your Insurance solicited. Agents wanted. Mention KANSAS FARMER.

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The National Mutual Fire Insurance Co.,

—OF—
SALINA, : KANSAS,

MAKES A SPECIALTY OF INSURING FARM BUILDINGS AND STOCK

Against loss by Fire, Lightning, Tornadoes, Cyclones and Wind Storms.

Premium Notes in Force and Other Assets, \$125,000.

Your Insurance solicited. Correspondence invited. Agents Wanted. [Mention KANSAS FARMER.]

J. E. BONEBRAKE, Pres't.
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Kansas Farmers' Fire Insurance Company,

—OF—
ABILENE, : : : KANSAS,

Insures Farm Property, Live Stock and Detached Dwellings

Against Fire, Tornadoes, Cyclones and Wind Storms.

CAPITAL, FULL PAID, : : : : \$50,000.

The last report of the Insurance Department of this State shows the KANSAS FARMERS' FIRE INSURANCE COMPANY has more assets for every one hundred dollars at risk than any other company doing business in this State, viz.:
The Kansas Farmers' has \$1.00 to pay \$18.00 at risk; the Home, of New York, \$1.00 to pay \$46.00; the Continental, of New York, \$1.00 to pay \$80.00; the German, of Freeport, Ill., \$1.00 to pay \$70.00; the Burlington of Iowa, \$1.00 to pay \$78.00, and the State of Iowa has \$1.00 to pay \$79.00 at risk.

— BUY BLACK DIAMOND —

PREPARED ROOFING GUARANTEED

LOOK HERE! You will want a Roof this year, won't you? You will want it Water and Fireproof and apply it yourself? You will want to save at least \$1.00 per square in price of that Roof? You will want it to last twelve years, and get it all complete and ready to put on and have no trouble whatever? Then buy the above direct from us, sole manufacturers.

M. EHRET, JR., & CO., 9th and Olive Sts., St. Louis, Mo.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal of said strays, to post a notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

Broken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders can take up a stray.

If an animal liable to be taken up, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered; also he shall give a full description of the same and its cash value. He shall also give a bond to the State of double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up (ten days after posting), make out and return to the County Clerk, a certified copy of the description and value of such stray. If such copy shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray, may, within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker-up of the time when and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear and appraise such stray, summons to be served by the taker-up; said appraisers, or two of them, shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker-up may have had and report the same on their appraisal.

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the State before the title shall have vested in him, shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Strays for week ending June 23, '86.

Thomas county--James N. Fike, clerk.
COW--Taken up by Milton Kileman, of Barrett tp. (P. O. Quicksilver), June 7, 1886, one brindle cow, 6 years old.

Johnson county--Henry V. Chase, clerk.
MARE--Taken up by J. M. Branham, of Aubry tp. (P. O. Aubry), one black mare, 16 or 17 years old, about 16 hands high, harness marks, right hind foot white; valued at \$25.

MARE--Taken up by John Larken, of Aubry tp. (P. O. Aubry), one bay mare, about 15 hands high, 10 years old, white spot on back, shod on left hind foot; valued at \$50.

Ford county--S. Gallagher, Jr., clerk.
COW--Taken up by Geo. B. Cox, of Dodge tp., May 28, 1886, one black and white spotted cow, 3 years old; valued at \$25.

COW--By same, one red and white spotted cow, 3 years old.

STEER--Taken up by Lewis Max, of Spearville tp., June 7, 1886, one Texas steer, dark blue, 3 years old, V on left hip, B on left side.

PONY--Taken up by E. Lawrence, of Spearville tp., June 8, 1886, one strawberry-roan Texas mare pony, 7 years old, M. O. on left hip and slit in left ear; valued at \$30.

COLT--By same, one dun mare colt, 1 year old; valued at \$10.

Butler county--James Fisher, clerk.
PONY--Taken up by J. S. Keys, of Bruna tp., May 24, 1886, one small bay mare pony, about 7 years old, blaze face, both hind feet white, crop off one ear.

Allen county--R. W. Duffy, clerk.
MARE--Taken up by John W. Herring, of Elm tp., May 10, 1886, one iron-gray mare, 4 years old, 14½ hands high, white spot over left eye; valued at \$60.

Cowley county--S. J. Smock, clerk.
STEER--Taken up by E. P. Sowers, of Dexter tp., November 2, 1885, one black steer, white face, branded K. O. & S. on left hip and T. L. on right side; valued at \$15.

Ness county--G. D. Barber, clerk.
HEIFER--Taken up by Mrs. Louisa A. Donestone, of Schouarle, June 3, 1886, one black heifer, 2 years old, branded E. O. on left shoulder; valued at \$15.

Hodgeman county--E. E. Lawrence, clerk.
HORSE--Taken up by J. R. Fertig, of Center tp., May 10, 1886, one bay horse, no marks or brands; valued at \$60.

Miami county--H. A. Floyd, clerk.
PONY--Taken up by Z. Cook, of Valley tp. (P. O. Paola), May 23, 1886, one gray Texas pony, 14 hands high, about 10 years old, branded on left hip and back part of ham.

PONY--By same, one sorrel Texas pony, blaze face, white legs, branded on left hip and side of head, 3 years old, 14 hands high; the two valued at \$60.

Strays for week ending June 30, '86.

Shawnee county--D. N. Burdge, clerk.
COW--Taken up by H. O. Gatliff, of Mission tp. (P. O. Topeka), June 23, 1886, one pale red cow, slit in flap on breast, one horn broken off, about 12 years old; valued at \$30.

FILLY--Taken up by J. C. Brown, of Topeka tp. (P. O. Topeka), June 25, 1886, one light bay filly, dark points, no other marks or spots, 2 years old; valued at \$25.

Rawlins county--Cyrus Anderson, clerk.
PONY--Taken up by G. W. Ware, of Laling tp., May 6,

1886, one brown horse pony, white spot on nose; valued at \$20.

Elk county--J. S. Johnson, clerk.

PONY--Taken up by L. Atterberry, of Pawpaw tp., May 19, 1886, one bright sorrel mare pony, three white legs up to the knee, branded on right shoulder with horseshoe with the letters CL beneath; valued at \$20.

PONY--By same, bright bay mare pony, dark mane and tail, about 6 years old, branded on the right shoulder with a horseshoe with a scar beneath the brand; valued at \$20.

HORSE--Taken up by E. B. Westwood, of Union Center tp., June 8, 1886, one dark bay horse, 16 hands high, harness marks on shoulder, small white spot in forehead, shod on front feet; valued at \$75.

MARE--By same, one light bay mare, collar marks on shoulder, a raised scar on inside of left fore foot, small rope around neck when taken up; valued at \$75.

Finney county--A. H. Burtis, clerk.

2 OXEN--Taken up by S. R. Vance, of Ivanhoe tp., one pair red work oxen, one branded O. C. on left hip, other with letter J, 3 years old.

Kiowa county--J. N. Cranford, clerk.
HEIFER--Taken up by L. D. Porter, of Wellsford tp., June 9, 1886, one light red 3-year-old heifer, 44 inches high, hind feet white, under-bit in left ear, upper bit in right ear, unknown brand on right hip, (P. O. address L. D. Porter, Dowell); valued at \$15.

Osage county--R. H. McClair, clerk.
MARE--Taken up by James E. Brown, of Superior tp., June --, 1886, one light bay mare, about 7 years old, white spot on nose and forehead, branded with diamond and anchor on left hip and shoulder and J on right shoulder; valued at \$35.

Norton county--Jas. L. Wallace, clerk.
PONY--Taken up by R. H. Knox, of Noble tp. (P. O. Lenora), June 8, 1886, one light bay horse pony, branded A. B. Y. on left hip, saddle marks; valued at \$30.

Miami county--H. A. Floyd, clerk.
PONY--Taken up by C. H. Pratt, of Wea tp. (P. O. Spring Hill), one dark iron gray mare pony, branded I C on left hip, leather halter on; valued at \$20.

Brown county--G. I. Frewitt, clerk.
2 COWS--Taken up by John Krey, of Robinson tp., January 7, 1886, two black and white cows, supposed to be 1½ years old, one has ring in nose; valued at \$15.

HORSE--Taken up by J. H. Warfield, of Morrill tp., November 18, 1885, one large bay horse, about 10 years old, nearly blind, no marks or brands; valued at \$70.

PONY--Taken up by Joseph Landhaute, of Robinson tp., June 12, 1886, one bay horse pony, 15 years old, about 15 hands high, Spanish brand on left shoulder; valued at \$15.

Douglas county--M. D. Greenlee, Dep. clerk.
PONY--Taken up by H. H. Cummings, of Clinton tp. (P. O. Belvoir), June 7, 1886, one roan mare pony, branded on left shoulder with B and bar and letter A above, and on right shoulder U; valued at \$25.

Neosho county--T. B. Limbocker, clerk.
MARE--Taken up by G. W. Cosner, of Big Creek tp. (P. O. Odense), June 2, 1886, one sorrel mare, 14 hands high, saddle marks, branded 76 on left shoulder.

3 MULES--Taken up by J. T. Lease, of Erie, June 12, 1886, three black 2-year-old mules, branded L. B.

Strays for week ending July 7, '86.

Cowley county--S. J. Smock, clerk.
MARE--Taken up by S. B. Stewart, of Cedar tp., June 12, 1886, one black mare, 14 hands high, left hind foot white and white star in forehead; valued at \$65.

PONY--By same, one sorrel mare pony, 14 hands high, white hind feet, Spanish brands on left shoulder and hip, blaze in forehead; valued at \$15.

Republic county--H. O. Studley, clerk.
PONY--Taken up by James O. Ward, of Union tp., one clay-bank mare pony, branded on left hip, two white feet, fax mane and tail, star in forehead, snip on nose, age unknown; valued at \$18.

C. W. WARNER & CO.,
Wholesale - Commission - Merchants,
Handle Butter, Eggs, Poultry, Fruit, Ranch Produce, Flour, Hay and Grain, etc.
397 Holladay street, Denver, Colorado.

GREAT BLUE RIBBON COUNTY OF
EASTERN KANSAS. Jefferson county
don't owe a dollar. Price List of Farms,
etc., free. Address Metzger & Insley, Oskaloosa,
Kas. Cut this out.

Do You Want a Home? Yes.

Then write to WM. J. ESTILL & CO., Medicine Lodge, Kas. They have for sale over one hundred tracts of Choice Land in Barber county, Kansas, suitable for farms or ranches. Payments cash, or terms to suit purchaser. Those desiring to locate in the best part of Kansas should write at once. Particulars free. City property--addition of 80 acres to Medicine Lodge--in lots 50x150 feet, at low cash prices.

FARMS AND RANCHES--INVESTMENTS
AND IMMIGRATION!

We have for sale or exchange Agricultural and Grazing Lands in Missouri, Kansas, Colorado, Texas and New Mexico, in tracts from one to one million acres. Wild Lands, \$1 to \$10 per acre on one to eleven years time. Improved Farms, \$10 to \$50 per acre, owing to location; terms reasonable. We are agents for Union Pacific Railway Lands, and locate colonies; buy and sell city, county, township, bridge and school bonds; make loans on first-class improved lands (personal examination) at 7 to 8 per cent, 2 to 5 years time. Correspondence and capital solicited. References and information given free. Special rates to excursionists. Address or call on Farm, Ranch & Investment Co., Room 32, Cor. 7th and Delaware Sts., Kansas City, Mo.

HOLSTEIN PARK.

W. A. TRAVIS,
HOLSTEIN BREEDER,
TOPEKA, KANS.

WM. A. & A. F. TRAVIS,
BREEDERS OF
Holstein - Friesian Cattle.

Inter-Ocean Stables, North Topeka.

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EDEN PARK FARM HERD.

ONE HUNDRED AND FIFTY

HOLSTEIN-FRIESIANS.

Excelled by None Equaled by Few.

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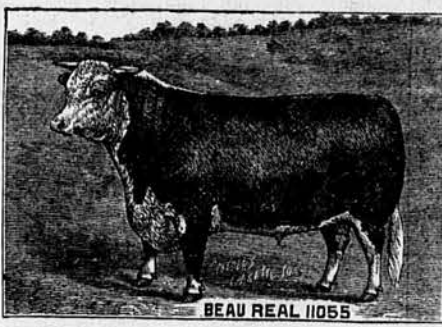
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The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

BROKEN ABSCESS IN THROAT OF COWS.—In your last number you give description of an abscess in the throat of animal. We have an excellent cow, four years old, whose disease is evidently an abscess. It gathered and broke, or has certainly disappeared. Now, what is to be done with the cow? Can any medicine be given to prevent the recurrence, or should she be fattened? [Now that the abscess has broke and disappeared it does not follow that it will recur again, nor is there any reason why she should be fattened. Give the cow a mild dose of physic—Epsom salts, 1 lb.; ginger root, 1 oz.; gentian root, 1 oz.; carbonate of ammonia, 1 oz. Give suspended in two quarts of cold oatmeal gruel. Do not use the milk while the physic is operating.]

DIABETES.—I wish information with regard to horse I have. He is six years old, had the distemper last spring early and got over that I think entirely, but about three months ago became stupid and could not stand much work; he was always thirsty, would drink a wash-tub of water, and in half an hour would drink that much more; it does not seem to do him any good, his urine being as clear as the water he drank. His flanks are drawn up and always gaunt; will not eat scarcely any grain; has not shed off yet; have been doctoring him lately for diabetes; medicine given was galic acid and opium and flaxseed tea for a drink, but he is getting worse, and I don't think the medicine is right. [The disease is called diabetes insipidus. Have six balls compounded, each consisting of the following: Iodine, 30 grains; sulphate of iron, 2 drachms; gentian root pulverized, 1 ounce; common mass 1 ounce. Give one every night for a week, placing it far back on the horse's tongue with the hand. Make a complete change in the horse's feed. If the hay and oats are not of the brightest and first quality discontinue feeding them and procure the best. Continue using the flaxseed tea.]

CARBUNCLE—SWEENEY.—Please tell me what the disease and cure, if any, for our eight-year old mare. About the first of September last she had a breaking out on hind leg at pastern joint; now extending from hoof to hock, and swollen to large proportions with occasional running sores located promiscuously over the affected limb; the discharges yellowish water or puss; not much lame, but seems painful; swelling reduces soon by exercise; appetite good; suckling a nice colt, a month old; sores dry up after a few days and appear again; feed oats and prairie hay; never received a hurt or had a scratch that I knew of. [The disease which you describe is commonly called carbuncle; considered by some as due to blood poisoning and by others as due to a simple inflammation of the sebaceous glands of the skin. The disease is usually a mixture of a small quantity of pus with synovia—the fluid which lubricates the tendons. Your mare will likely have a thickened limb owing to its not being properly attended to. The sores which appear should be poulticed with linseed meal applied warm and changed twice daily, when the part should be cleaned with warm water. Continue the poultice, so long as the slightest appearance of discharge is evident, for if discontinued too soon it will always break in a fresh place. Feed the mare principally on grass or other easily-digestible food when the discharge ceases. A weak solution of alum is all that is necessary to complete the healing process.]

A number of black Javahs have been carried to England. The breed attracts some little attention there. The Plymouth Rock has never been very popular on the other side of the water.

For Cuts, Galls, Old Sores, Scratches, Thrush, etc., use Stewart's Healing Powder, 15 and 50 cents a box.

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If you want eggs from your Brahmas don't feed them too strongly. They take on fat readily, and when fat they do not lay. Plymouth Rocks and Wyandottes need liberal feeding when they are laying.

Small fruit culture will always be most successful on the intensive plan. Plant only a small area at a time and give that the best culture possible. Better raise 300 bushels on one acre than that amount on five or six.

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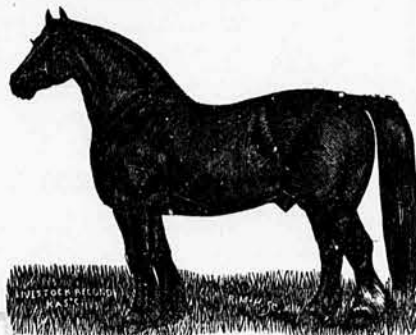
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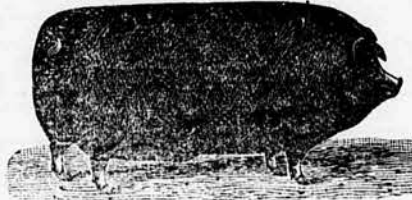
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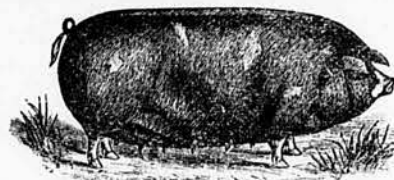
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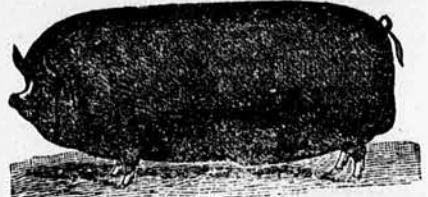


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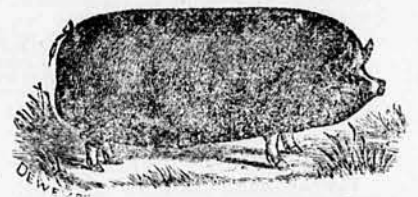
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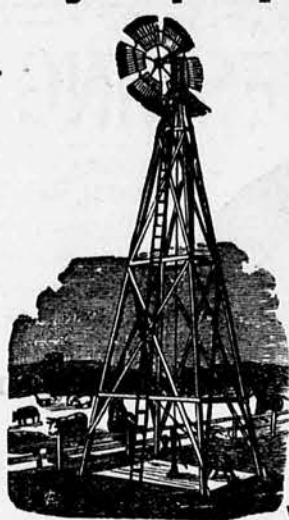
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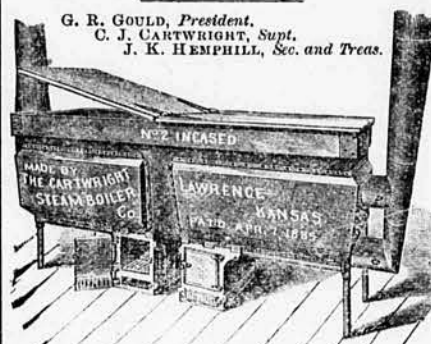
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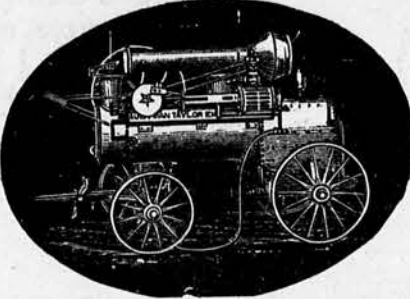
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To the good Farmers and Threshermen of KANSAS and we know of no customer but will admit we gave him more Some of the Machines we sold around here when we first case in other sections. M. A. and W. W. Wisecarver, of last season to replace an AULTMAN & TAYLOR SEP-do good work, but they thought it about time to give the old chinery can show such a record as the "OLD RELIABLE"



MISSOURI, direct and through our able representatives, and for his money in this line than he could obtain elsewhere. came to this country are still running, and the same is the Keighley, Butler county, Kansas, bought a Thresher of as ARATOR they had run for thirteen years, and would still Machine a rest. We don't think any other Threshing Ma-STARVED ROOSTER THRESHER.

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Respectfully, **TRUMBULL, REYNOLDS & ALLEN,**
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FOR SALE—A Ten-Horse-Power Aultman & Taylor Traction Threshing Engine in good repair. Address S. H. Downs, Topeka Seed House, Topeka, Kas.

FOR SALE OR TRADE—Five hundred Sheep, including 135 Lambs. Will trade for cattle or horses. For particulars address, E. T. Frowe, Pavillion, Wabunsee Co., Kas.

SHORT-HORNS FOR SALE.—On my ranch, ten miles north of Emporia, I have over eighty head of Thoroughbred Short-horns. I will sell nineteen Bulls, one and two years old, and some of my Cows and Heifers. They are of the very best kinds, embracing Princess, Duke of Thorndale, Red Rose, Airdrie, Rose of Sharon, etc. Prices greatly reduced. C. B. Bacheller, Emporia, Kas.

FOR SALE—One hundred Grade Hereford and Grade Short-horn Cows, all bred to Thoroughbred Hereford Bulls. Also 100 Grade Hereford and Gallo-way yearling Bulls. Garth & Co., 1410 Union avenue, Kansas City, Mo.

FOR EXCHANGE—A hotel property at county seat of one of the best counties in northern Indiana, for farming land in Kansas. Address Thos. A. Starr, Goshen, Ind., stating what you have for trade and where located, with description and price.

STOLEN—From my farm, near Jamestown, Cloud County, Kas., on June 24th, a 6 year-old dark brown Horse, black mane and tail, about 15 hands high; weight, about 900 pounds; a little white on one hind foot, scarred, and hair worn off right flank and inside of left hind leg; lock of white hair in mane where collar fits; collar mark on left shoulder. Will throw ears back and set cross when approached in stable. Will hold stiff tail when being crupped. He had on when stolen a new copper riveted headstall—silver-mounted buckle; one of the squares had been broken and new square inserted; old rivet cut out. I will pay \$25 reward for information that will lead to the recovery of the horse, and will pay \$75 for the arrest and conviction of the thief. F. A. Lane.

STRAYED—One dark bay Horse, 6 years old, 15 hands high, collar marks high up on both shoulders—fresh-made, long mane—clipped under collar-pad. Also, one bright bay Horse Pony, 9 or 10 years old, snip on nose, leather strap around neck, he is a cribber. The finder will be rewarded for information about said animals. Jas. Hayden, Cummings, Kas.

I AM A CANDIDATE FOR CLERK OF THE DISTRICT COURT, subject to the decision of the Republican convention, July 21, 1886. William M. Abernathy.

HUMPHREY'S HOMEOPATHIC VETERINARY Remedies for sale by D. Holmes, Druggist, Topeka, Kas.

BARTHOLOMEW & CO., Real Estate and Loan Brokers, 189 Kansas avenue, Topeka, Kas. Write them for information about Topeka, the capital of the State, or lands, farms or city property.

SIX HOLSTEIN-FRIESIAN BULLS—For sale at the Timber Line Herd Farm, at very low prices. Ask for anything you want. W. J. Estes & Sons, Andover, Kas.

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A PUBLIC AUCTION SALE—Of 100 head of Thoroughbred and Grade Short-horn Cattle, consisting of Bulls, Cows, steers and Heifers. This stock will be sold to the highest bidder, without reserve, at River Home, two miles west of Reading, Kas.,—Doctor Eldson's entire herd—as he desires hereafter to breed and handle horses exclusively. Sale to begin from 10 a. m., July 15th, 1886. Six months time, with no interest, will be given on good security, or nine months time with interest, if preferred. Five per cent. off for all cash. For further particulars, address Dr. A. M. Eldson, Reading, Kas.

STRAYED—A light bay, spirited Pony Mare, 7 years old, white forehead, hind foot white, brand on left hip, shoes on front feet. Address, for liberal reward, S. J. Yager, Auburn, Shawnee Co., Kas.

FOR SALE—Nine hundred fine-wooled Sheep. For particulars address S. J. Yager, Auburn, Shawnee Co., Kas.

Public Sale!

Having leased my farm, I will offer at public sale, on my farm, four miles south of Salina, Salina Co., Kas., on Wednesday, July 28, 1886,

My entire lot of breeding stock and farming implements, as follows: Five highly-bred Clyde mares, bred to an imported Clyde stallion; a number of yearling Colts; twenty head of high-grade Short-horn cattle; seventy-five head of thoroughbred Poland-China hogs, of various ages, headed by the old show hog and breeder, Wide Awake 2d 3895.

My hogs have taken more than five times as many premiums at the fairs in the last two years as any herd in central Kansas.

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M. S. PRICE, Auctioneer.

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Of the NORWOOD HERD OF JERSEYS at bottom prices. Fifteen head of young Cows and Heifers of the best milking families. Also two-year-old Alphas Reitor—the best bull I ever owned. For prices and particulars, address E. A. SMITH, Norwood Stock Farm, Lawrence, Kas.

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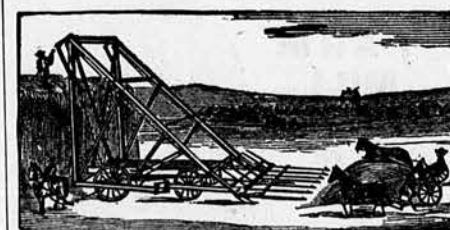
Address O. F. SEARL, Solomon City, Kansas.

7 Bulls 7 FOR SALE.

We offer the splendidly-bred Flat Creek Mary Bull YOUNG MARY DUKE for sale. Also six others—one Fibert, one Adelaide, two Galateas, one Rosamond, one Nannie Williams. YOUNG MARY DUKE has been used in our herd for two years; calved February, 1883; he is a red, and breeds; got by 6th Duke of Acklem, dam Rarrington Bates 11th by 20th Duke of Airdrie 13,872, grand dam Red Belle 2d by Bell Sharon, etc. Come and see him and his calves. Prices low. MILLER BROS., JUNCTION CITY, KAS.

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FIRST ANNUAL PUBLIC SALE

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Thirty-five miles southeast of Kansas City, on the main line of the Missouri Pacific railroad, at the time and place above named, I will make my first annual public sale of Short-horns, consisting of thirty-five head of Cows and Heifers and five Bulls, of well-bred Short-horns. Several first-class show animals in this selection, and all good, square, useful animals, such as need no labels to show what breed they belong to. The following families are represented, to-wit: Rose of Sharon, Flora, Phyllis, Fibert, Rosamond, Young Mary, Goodness, Lantha and Recilla. TERMS:—Cash; but those desiring credit can have the time which best suits them, from four (4) to twelve (12) months, on acceptable bankable paper at 10 per cent. per annum. Reduced Rates on all railroads on passengers and freight. Trains run to suit persons wishing to attend from any direction. From north and west, easy connection can be made through Kansas City, and from the southwest through Fort Scott.

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